In this issue
GUIDE TO CRM BULLETIN ARTICLES

CRM
BULLETIN

Volume 12: No.1 Cultural Resources Management • National Park Service **1989**
A Technical Bulletin for Parks, Federal Agencies, States, Local Governments, and the Private Sector


Frederick Douglass


Bessie Smith


Louis Armstrong


Dr. Mary McLeod Bethune


Dr. Martin Luther King, Jr.

Black History

One effect of Black History Month is that it helps sensitize us to the special difficulties and unique opportunities in identifying and preserving sites associated with Black Americans, and to the issues facing those who must manage, interpret and protect these cultural resources. As the role of Black Americans in our culture gets special recognition during this time, part of this commemoration is appropriately focused on achievements in the area of historic preservation.

Several efforts can be cited to illustrate the Service's commitment to ethnic and minority preservation and interpretation: the National Historic Landmarks program—working with the states and local preservation commissions—is conducting a theme study on ethnic and minority history that will identify additional NHLs associated with Black history; the National Register of Historic Places is working closely with Black colleges and universities to list significant properties on the Register; the Historic American Buildings Survey/Historic American Engineering Record is increasing its recruitment efforts at Black colleges; the NPS has signed a cooperative agreement with the Afro-American Institute for Historic Preservation and Community Development, to develop options for long-term preservation and use of Black NHLs, to evaluate NPS interpretation of the Black experience in park units, and to do NHL studies; and the NPS has joined the National Trust for Historic Preservation in the Trust's Minority Heritage Preservation Task Force.

On the local level, National Capital Parks-East, working with the government of the District of Columbia, has developed a Black History National Recreation Trail that features sites commemorating important Black Americans; at the Maggie L. Walker National Historic Site in Richmond, VA, the park is using the results of an interdisciplinary study by Howard University to more accurately interpret Maggie Walker (see *CRM Bulletin*, Vol. 10, No. 1); and the NPS, in cooperation with the University of Maryland-Eastern Shore, sponsored a symposium on interpretation of slavery.

In considering how best to observe Black History Month in the *CRM Bulletin*, the editors felt that rather than feature Black history in one edition of the *Bulletin* during the month of February, we would devote more time and space to address the key issues associated with this topic in a series of articles over the next year. The series begins with a photo essay in this issue (see center spread). Future articles are expected to encompass a range of topics, some of which are listed below.

- interpretation of cultural resources in the NPS associated with Black Americans
- organizations and activities concerned with preservation of Black sites outside the National Park System
- gentrification, displacement and other economic concerns
- visitation to parks associated with Black Americans
- Black community efforts in historic preservation
- Black professionals in historic preservation
- measures to promote the relevance of Black historic preservation to both Black Americans and the Nation as a whole

The *Bulletin* will feature articles from NPS authors as well as members of the Black community at the state and local levels, educators, and practitioners. The editors encourage your contributions and suggestions for this series of articles.

PARTNERS

State Park Directors and Outdoor Recreation Liaison Officers to Receive CRM Bulletin

The National Conference of State Historic Preservation Officers, the National Association of State Outdoor Recreation Liaison Officers, the National Association of State Park Directors, and the National Park Service formally joined forces last year to more effectively accomplish their individual missions to protect significant cultural and natural resources and to provide recreational opportunities. To help meet the goals of this partnership, we have added the State Park Directors and Outdoor Recreation Liaison Officers to the CRM Bulletin *mailing list. We welcome these officials to the readership, which also includes the State Historic Preservation Officers, Certified Local Governments, NPS offices and park units, and a number of preservation organizations and educational institutions. We invite comments and suggestions for articles. —Editor.*

New feature: This issue contains the first edition of "Preservation Technology Update," see page 17

The Fort Union Reconstruction Archeology Project

William J. Hunt, Jr.

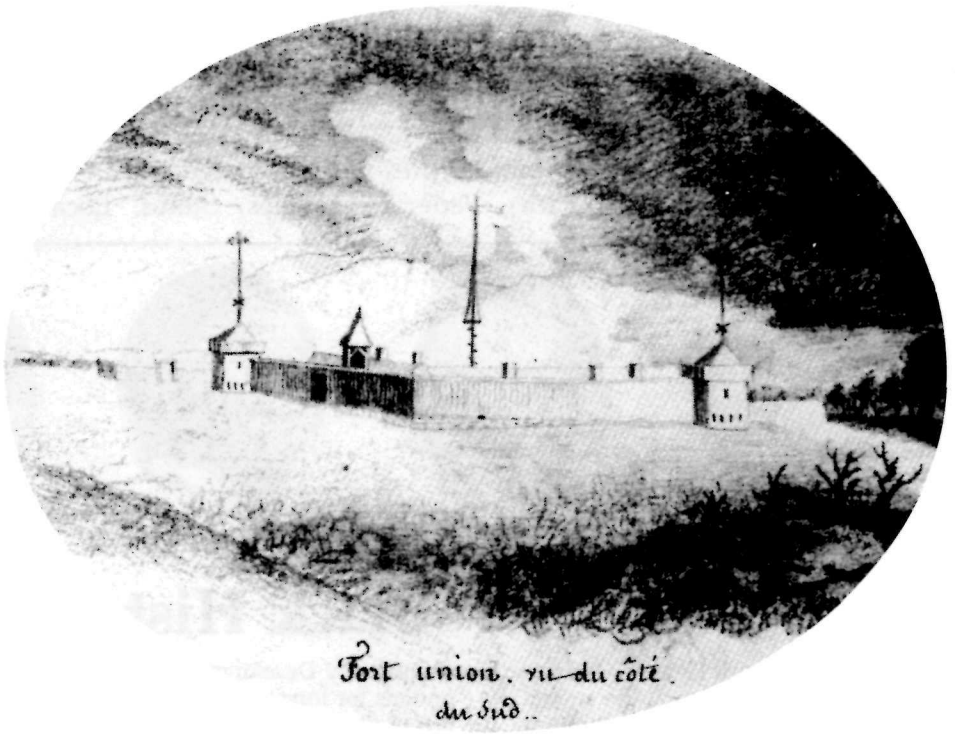
During the late 1820s and early 1830s, the fur trade on the Upper Missouri and in the Rocky Mountains was quickly giving way under an array of new economic forces. As these changes took shape, a new economic order flowered in the wilds of the Far West which centered on a new product, gathered and prepared by exclusive producers and intended for an entirely different market—the domestic American economy rather than for export. Increasingly, fur traders placed greater emphasis upon the bison and bison robes.

In response to the burgeoning trade in bison skins, a new enterprise arose on the American frontier. This was the Upper Missouri Outfit, or UMO for short, a conglomerate of experienced traders and forts which represented the most western arm of John Jacob Astor's powerful American Fur Company.

Kenneth McKenzie, a company trader and part-owner, recognized the potential of the site at the confluence of the Yellowstone and Missouri rivers (about where the Montana-North Dakota state boundary is situated today), and in October of 1828 or 1829, ordered that a trading post be built there. In addition to acting as the UMO center of operations, this facility, known as Fort Union, also served as the principal American trading post for the Assiniboin Indians. Through its various subsidiary posts and wintering houses, it was also engaged in trade with the Sioux, Plains Cree, Blackfoot, Crow, and other natives in the Northern Plains.

By 1867, Fort Union was a mere shadow of its glorious past. No longer economically viable, the crumbling ruin was sold to the United States Government for building materials to aid in the construction of the Army's new Fort Buford. By 1868, it was gone.

In 1965, Fort Union was recognized by Congress as a site of major significance to the understanding and interpretation of American history. With this recognition, the archeological site was included in the National Park System as Fort Union Trading Post National Historic Site.



Fort Union as it was seen in 1847 by Father Nicholas Point, S.J.

In December of 1985, Congress appropriated funds for the reconstruction of Fort Union. Before this could take place, however, additional information was required for each of these structures. Previous historic research had largely exhausted the primary documentary record letters, journals, illustrations, and business records as a source of information. It was clear that additional data about structure sizes and construction methods could only be obtained through archeology. To provide this information, the Midwest Archeological Center (MWAC) initiated a series of large-scale excavations beginning in the summer of 1986. An investigative team was established and a scope of work was developed to meet the various needs. The scope of work addressed a number of specific points relating to Fort Union architecture. These related to the size of primary and secondary structures expected to be encountered; their locations within the site; methods of construction employed historically; as well as the location of gravel paths and wooden walks, fences, wells, and latrines.

The mitigation of the construction impacts upon the cultural resources also offered MWAC archeologists, and others interested in the Indian trade, a unique investigative opportunity. This would provide information from which one could study the robe trade and the people involved in it, and this from a perspective not offered by historical documents, i.e., by examining the "fossilized" residue of its occupants' activities and actions. Best of all, there was the potential of looking at the common, generally illiterate people at the fort (the Indians, the lower status employees, and their families) from a point of view not biased by the upper class perspectives of literate clerks, bourgeois, and fort visitors.

Excavation

The archeological tasks which lay ahead were formidable and resulted in the largest excavation ever conducted on a single site by MWAC. Between May of 1986 and September of 1988, MWAC crews spent over 12 months excavating at Fort Union. These were an interesting blend of professional excavators and volunteer laborers. This project was deeply involved in the NPS Volunteer in Parks (VIP) program, with over 150 volunteers from all over the country spending one or more weeks working at the site. Virtually none of these had archeological experience. Nevertheless, they showed a great deal of drive and dedication, sticking it out even under the extremely hot (often over 100° F) and dirty conditions common at the Fort Union site. The amount of labor contributed was considerable and was one of the primary factors ensuring the success of the project as a whole.

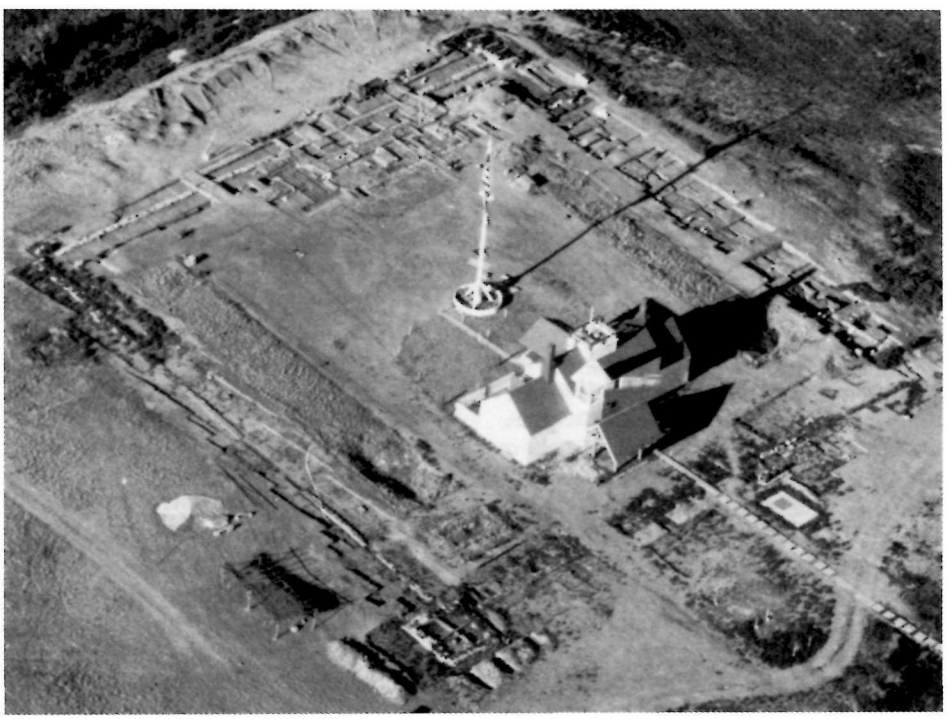
During the three field seasons, approximately 40,000 sq. ft. of the site was excavated inside and outside the fort palisades. Several innovations were introduced to the field work to increase the efficiency of this large scale undertaking. These concentrated upon the processes used to recover artifacts, record excavation information, and production of site maps.

To promote rapid recovery of artifacts, two large, motorized screening machines were used. These were nothing more than slightly modified, commercially manufactured, agricultural grain cleaners. Soil excavated from the site was shoveled into one end of a machine's 3 feet diameter rotating drum. This drum was covered with a skin of 1/4 inch mesh hardware cloth which allowed the dirt to fall through the screens while retaining the artifacts inside. As the drum revolved, artifacts rolled gently through and were deposited in a bucket set at the opposite end. Usually, excavation and manual screening can involve two to three people. At Fort Union, the use of the screening machines enabled artifacts to be removed from the soil in only about 10% of the time. This much increased processing time allowed each crew member to maximize their time spent excavating and recording information.

Computers were used to reduce the time required in recording excavation information. Small lap computers were used on the site to catalog artifacts, log photographs, and write descriptive overviews of excavations as they were in progress. All documentation was more or less in its final form at the time it was entered, in contrast to the traditional methods where handwritten notes are transcribed by a typist. The use of field computers also made the final site notes more accurate because no errors could be introduced in a transcription process. Larger, portable computers were used to prepare weekly reports, making excavation information available almost immediately to interested state and Federal authorities. In the winter, these computers were used to prepare reports describing the methods and results of the previous field season's efforts.

One of the most time-consuming aspects of archeological work is the production of site maps which show the locations of all excavations and the cultural features (fireplaces, trash pits, structures, etc.). Usually these are hand drawn from the field notes after the crew has returned from the field. Any mistakes made during this process often result in a complex map having to be completely redrafted. This changed in 1988, when a computerized drafting system was moved into the basement of the newly constructed Bourgeois House. This revolutionized the drafting process, allowing complex field maps to be produced on-site as the excavations took place. Maps generated in this way can be edited and corrected almost instantaneously in comparison with the laborious methods used prior to this. New maps can be generated and printed to any scale. They can be produced in black and white or in color almost immediately thereafter and are of a quality suitable for inclusion in the final printed report.

Prior to beginning each season of excavation, several of the major structures scheduled for reconstruction were targeted for investigation. In 1986, the Bourgeois House, Kitchen and a portion of the North Palisades were examined. During the 1987 fieldwork, crews investigated the southwest Bastion, Northeast Bastion, East Palisades, North Palisades, and North Gate. By 1988, only the areas associated with the South Palisade, West Palisade, Main Gate, and Indians' and Artisans' House were left to be examined.



Aerial view of 1986-1988 excavations showing reconstructed flagpole and Bourgeois House

(continued on page 4)

Fort Union Reconstruction
(continued from page 3)

As excavations took place, MWAC archeologists were able to assist the timeliness of the reconstruction process by insuring that Rocky Mountain Regional Office (RMRO) architects had structural information as soon as possible. Often, this was transmitted the same day that it became available. Preparation of accurate reconstruction plans was further aided by making fixtures, paint chips and other relevant objects available almost immediately after discovery. In 1986, these measures insured that construction was able to begin on the Bourgeois House, the first building to be erected, within a few weeks of completing that structure's archeological investigation.

In addition to structures scheduled for reconstruction, MWAC archeologists discovered at least three major structures for which very little or no information was available in the historic document for Fort Union. In 1987, a large building was partially exposed between the Store Range and the East Palisades. Until an analysis of the artifacts and excavation data takes place, however, archeologists will not be able to determine with certainty the manner in which this building was used. It appears to be associated with the Store Range, however, and may have been used to warehouse bison robes, furs, trade goods, and other fort supplies. Two other structures were discovered in 1988 under the Indians' and Artisans' House. The deepest (and therefore earliest) was Fort Union's original blacksmith shop, a building whose general location was identified by Prince Maximilian in 1833. Above this was another structure whose western half contained a gunsmith shop. This building may have been in existence sometime in the 1840s and may be a structure identified in 1843 by Edwin Denig, the bourgeois of the fort at that time.

Analysis

MWAC archeologists also discovered the remains of a number of secondary structures during their investigations, many of which were either previously unidentified or their locations were uncertain. Among these were the remains of the palisade bracing, a dairy, the North Gate, Army-era (post-1864) storerooms, three (post-1863) privies, a shallow basement for an unidentified (ca. 1830s) structure, charcoal house for the post-1833 blacksmith shops, horse stables, a possible corral, a late 1850s saw mill. A number of other small structures were also recorded whose function can not be ascertained at present.



Many complete bitters bottles of various kinds were recovered from three 1860s latrines.

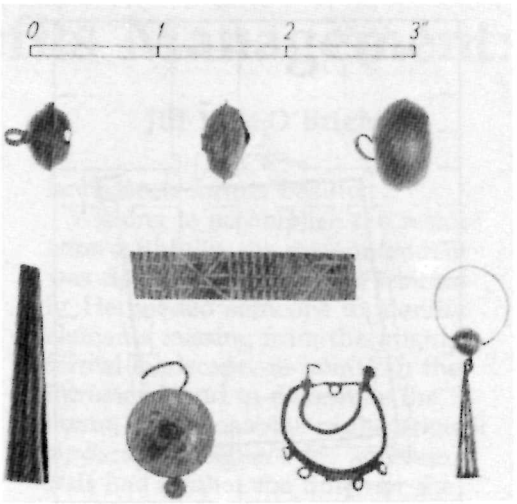
Along with evidence for various structures and buildings, hundreds of thousands of objects were found which had been lost or discarded by Fort Union's inhabitants. This garbage and debris, left behind by employees and visitors to the post, can tell us much about the quality of life there. These have been removed to the MWAC archeological laboratory in Lincoln, Nebraska, for cleaning and analysis. Common items stored there include glass and metal containers; gun parts and ammunition; ceramic dinnerware; tools for making and repairing objects of wood and metal; building materials; clothing items; glass beads and decorated ceramic tobacco pipes of almost infinite variation.

Most of the structures and artifacts relate, of course, to the employees of the UMO and their families. However, a significant proportion of the artifacts and hundreds of the cultural features (fire hearths, pits, post holes) are related to the site's Native American occupants. During the last year of MWAC's work at Fort Union, it was discovered that a significant component of the site was related to prehistoric Indians. The artifacts (pottery, stone arrow points, and other stone tools) indicate that people related to North Dakota's earth lodge dwellers occupied the terrace edge sometime between AD 1400-1700. The lack of evidence for permanent structures and the widely scattered artifacts suggest that this component of the Fort Union site may represent a temporary encampment, where Indians may have lived in skin tents during spring or fall buffalo hunts.

One hundred and twenty years later, Indians continued to come to the Fort Union site, this time to trade the fruits of their hunt for merchandise manufactured in Europe and the eastern United States. MWAC archeologists were not too surprised to find considerable evidence for historic Indians both inside and outside of Fort Union's palisades. Inside the fort, this evidence consisted of earrings, copper wire bracelets, finger rings, stone and clay pipes, fragments of trade muskets, game markers, and beaded clothing. Although many of these may relate to the fort's employees' Indian wives, others may be attributed to the large numbers of Native Americans who came to trade at the post. Some of the objects found inside the post may have been broken or lost by the headmen of these visiting bands since they and their immediate families were commonly allowed inside the fort to live with their families during their stay. Those of lower status usually remained outside the palisades. Evidence for their encampments were suggested during the 1986 excavations when numerous fire pits, post holes, and trash pits were discovered north of the fort. Similar features were identified immediately south of the Northeast Bastion in 1987 and it is probable that such features may cover the greater portion of the terrace top in the vicinity of Fort Union.

This winter, the physical rebirth of Fort Union entered its final stages with the resurrection of the palisades, bastions and trade house. Historical archeologists at MWAC are only at the beginning of their research into frontier life at Fort Union, however, for the archeological project is only now entering into the most important aspect of its work. Now that the field work has been completed, researchers at

MWAC are faced with the monumental prospect of processing, analyzing and curating the tremendous number of artifacts and excavation records generated by the reconstruction project. Since the resumption of field work at Fort Union in 1986, a small laboratory crew has been processing (washing, drying, sorting, stabilizing, and curating) the recovered materials. This task is so large that it is expected to continue into 1990, given the current levels of funding. Before this work is completed, however, MWAC archeologists will be engaged in an intensive research effort which is directed toward and based upon the artifacts, excavation records, and historic documents. This effort will focus upon many of the research issues identified in the 1986 scope of work and result in the generation of a number of documents for internal NPS use and various publications intended for public consumption. The documents prepared by MWAC will provide the NPS with information useful for understanding and interpreting Fort Union, and similar sites within the NPS system, to the public. Publications generated from these documents will also address the concerns of the public interested in historic archeology, the Indian trade, and myriad things of everyday life. In this way, the archeology of Fort Union, only partially understood now to the few specialists who excavated the site, will become understandable to a broader audience of scientists, historians, park planners, interpreters, and the general public.



Items for trade in the Fort Union Indian store. Top row — "hawk" bells of various sizes. Middle-flatted copper ring. Bottom row (l to r) — tinker cone for attachment to hair, clothing, and jewelry. The rest are various kinds of earrings.

William Hunt is supervisory archeologist at the Midwest Archeological Center in Lincoln, NE.

AutoCAD and Fort Union Trading Post: The Field Application of a Computer Aided Drafting Program

Bill R. Chada

The 1988 excavation season marked the first time the Midwest Archeological Center field tested a computer aided drafting program. This article deals with the use of AutoCAD Drafting Package, a computer aided drafting (CAD) program and its viability for field applications. AutoCAD has been used by the Midwest Archeological Center in the laboratory for other projects but in 1988 computer graphics came to Fort Union Trading Post NHS.

Fort Union Trading Post National Historic Site is located near the confluence of the Missouri and Yellowstone rivers in what is now western North Dakota. It was a major frontier trading post built by John Jacob Astor's American Fur Company in 1829 and operated into the 1860s.

Introduction to AutoCAD

In 1983, the Autodesk Corporation of Sausalito, California released AutoCAD Drafting Package. This computer aided drafting program, used for general purpose drafting applications, has no limit to the types of line drawings it creates. AutoCAD can create any drawing created by hand. Specific applications often recognized with AutoCAD include architectural, electronic, and mechanical drawings. The AutoCAD Drafting Package Reference Manual (1986:Preface) lists many applications for AutoCAD. Among them are several which relate to archeology very well. Applications include constructing work-flow charts, graphs of all kinds, topographic maps, architectural drawings, and technical illustrations.

AutoCAD uses MS-DOS operating system and requires no technical computer knowledge to operate. This ease and speed of operation makes AutoCAD very useful. No longer is it necessary to wait until after leaving the field to create a site map. With usage in the field and in the laboratory, small laptop and personal computers are creating site maps and various illustrations of publishable quality.

When drawing with AutoCAD, data entry is carried out via the computer keyboard, a mouse, a digitizing tablet or several other devices. The precision of the data will vary greatly depending on the device used. Using a digitizing tablet will be far more accurate than using a mouse. Entering the exact coordinates using the computer keyboard instead of a digitizing tablet will ensure a precise location of an object. The computer keyboard and a digitizing tablet were used at Fort Union.

AutoCAD drawings consist of multiple drawing layers. These layers help to classify entities within a drawing. Layer names and contents vary with each drawing. There is no limit to the numbers of layers a drawing may have. Layers may be displayed all at once, one layer at a time, or any combination of layers may be displayed and/or printed. Several examples of the types of maps generated from just one drawing are given. Figure 1 deals with the excavation blocks from the 1986-1988 field seasons. By adding another layer to the drawing, we are able to locate the 1830s palisade and bastions, as seen in Figure 2. Figure 3 displays AutoCAD's ability to handle complex drawings.

(continued on page 6)

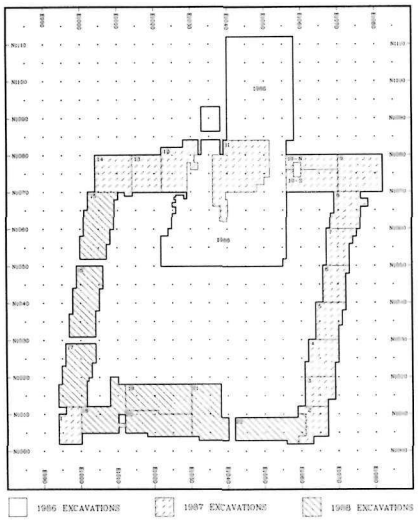


Figure 1

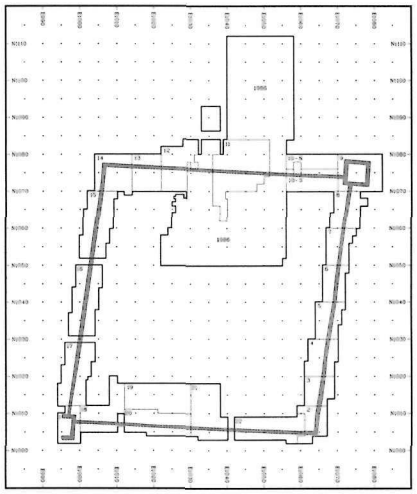


Figure 2

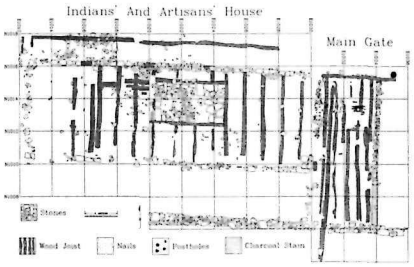


Figure 3

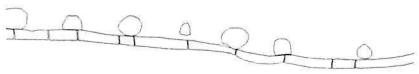


Figure 4

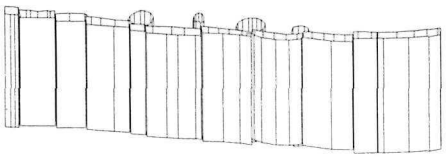


Figure 5

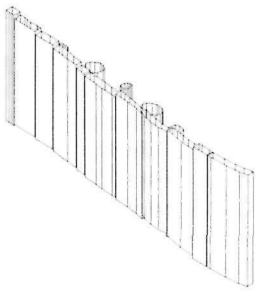


Figure 6



Figure 7

AutoCAD

(continued from page 5)

This is the plan view of the Indians' and Artisans' House and the Main (south) Gate area of the fort. This area is located in the 1988 excavation blocks 19, 20 and 21.

Another AutoCAD advantage is the ability to create 3-Dimensional drawings. A 3-D drawing is nearly as easily created as a 2-D drawing. The difference in drawing the 3-D image is the entering of the elevation and thickness for each point of an entity. 2-D drawings have a program default elevation and thickness set prior to the drawing of each entity. All of the Fort Union drawings are in 3-D.

When viewing 3-D drawings, the use of AutoCAD's View Point Command becomes important. AutoCAD has the capabilities to rotate a drawing 360 degrees vertically and 90 degrees horizontally. This enables views of the drawing from the plan view, profile or any angle in between. The drawings are also rotated and viewed from any direction (i.e., north, south, east, west or any variation). Any combination of vertical and horizontal angles are viewed and/or printed. Close-ups of any area of the drawings are also possible. These close-ups, acting very similar to the zoom lens of a camera, will give maps details that other views may miss.

Examples of 3-D drawings may be seen in Figures 4-7. These drawings are taken from the 1988 excavation unit N1007/E1042. The drawing represents the base of the 1829 palisade. Figure 4 displays the plan view of the excavation unit. A 3-D plan view appears identical to a 2-D drawing but the 3-D image becomes apparent when the drawing view point is changed. Examples of how AutoCAD drawings may be rotated to obtain different view points is seen in Figures 5-7.

Field Application

Presently, Fort Union has one modern reconstructed building (Bourgeois House) which houses the museum and administrative offices. This controlled environment was the location for the AutoCAD drafting equipment but AutoCAD neither requires nor limits itself to this. Hardware requirements for the 1988 field season included an IBM compatible computer with a 40 megabyte hard disk. A 12x18" digitizing tablet, a graphics printer and a six-color plotter were also employed.

There are many advantages for having AutoCAD in the field during excavations. Some of these advantages for this on-site mapping include developing weekly progress report maps for the use of the Rocky Mountain Regional Office. Like many sites, data recording errors are occasionally made by the excavators but with in-field mapping capabilities field errors are quickly corrected without any loss of data. The ability to question the excavator or to visually inspect the problem excavation units allows for quick corrections.

The disadvantages of using the AutoCAD system in the field include the protection of the hardware itself. Most equipment requires a dirt and moisture free environment which is sometimes difficult to obtain in the field. The power supply sometimes is lacking. Batteries which power the computer, at present only operate about 1-3 hours before requiring recharging. Another problem which occurred at Fort Union concerned the inability of data entry to keep pace with the excavators. There was one data entry person and at least 40 excavators at any one time generating level forms and maps. On smaller sites or sites with smaller crews this problem may not have occurred, but like many other situations, a bottleneck was created with too much information to be processed by only one individual. Fort Union was a good test case for proving the value and limitations of the program and hardware.

We learned AutoCAD has the ability to manipulate all types of data and it can create nearly an infinite number of maps from a single drawing. AutoCAD demonstrates a versatility of problem resolution with respect to archeological field situations.

The Fort Union Trading Post was the first and hopefully just the beginning of continued on-site use of AutoCAD on National Park Service archeological projects.

Bill Chada is an archeologist at the Midwest Archeological Center in Lincoln, NE.

Research Benefits Management: A Case Study

Jill York O'Bright

When Norman D. Hellmers assumed the Superintendency of Lincoln Boyhood National Memorial in Spencer County, Indiana, in August 1981, lightning struck. Literally and figuratively.

A late summer thunderstorm resulted in the destruction of one of several 50-year-old tulip poplars which lined the grassy allee leading toward the grave of Abraham Lincoln's mother. The park maintenance staff cut the tree down. None of this was unusual. Superintendent Hellmers' response to the situation was.

This is the story of a Superintendent who saw a problem others before him had not seen, and did not walk away. It tells how he determined to restore a resource, how he worked with others to obtain the information he needed to accomplish the restoration, and how his park benefitted from the research project. This is the story of the reestablishment of the formally landscaped grounds of Lincoln Boyhood National Memorial.

When Hellmers asked the maintenance crew how the park generally went about replacing missing trees, he learned replacement of missing specimens was not common practice. Large gaps interrupted the pattern of sycamores, tulip poplars, and dogwoods. The few red oaks gracing the parking plaza between the memorial building and the allee suggested a once-formal arrangement, but because so many oaks were missing the original pattern was difficult to determine. There were intrusions. Full-grown trees randomly invaded the rows of shrubs. A circle of spirea and a smattering of Japanese cherries seemed out of place at the flagstaff court. The courtyard flower beds contained remnants of a red, white, and blue scheme planted for the Nation's bicentennial. Enough remained of a symmetrical pattern to indicate the area had been formally designed. Unfortunately, the landscape was severely altered by missing or intrusive fragments. Hellmers resolved to restore the landscape's former beauty.

Wishing to accomplish the restoration faithfully, the superintendent was determined not to act arbitrarily. He needed someone to identify elements missing from the original formal landscape, to point out the intrusions, and to determine the intent, or philosophy, of the original landscape designers. He and his staff had neither the time nor the expertise to accomplish the needed research, so he contacted the Midwest Regional Office for assistance. In spring of 1983, Cultural Resources Management Chief Andy Ketterson assigned me the task of preparing what was then known as a historic grounds report (now a cultural landscape report) for the formally landscaped portions of Lincoln Boyhood National Memorial.

Hellmers informed me he wanted to know what was intended by the park's originators, what they designed, and what they built. A bit embarrassed, at first, by my lack of familiarity with the landscape elements, I snatched small samples of plant materials I did not recognize, taped the samples to note cards, and quickly sketched the plants' locations on the cards. Upon my return to Omaha, landscape architect Keith Krueger helped me identify the unfamiliar species. In short time, however, the park staff made me feel quite comfortable in asking anything about which I was unsure, and readily provided answers to my inquiries about plant materials, maintenance techniques, and past and current management procedures.

Research

Once familiar with the landscape and the problems requiring resolution, I employed traditional historical research methods to learn as much as possible about the original design and the designers' philosophy. I began studying reports and records promulgated by those who created the Indiana Lincoln Memorial in the early 20th century. Those documents gave me a broad familiarity with the project, the time frame, and the key players involved, including noted landscape architect Frederick Law Olmsted, Jr.

Armed with this information, I sought more specific data concerning the Indiana Lincoln Memorial and its framers. From the Library of Congress, I obtained copies of Olmsted's papers related to the project. This collection contained two essential types of documentary evidence: correspondence and landscape designs. The correspondence proved an invaluable source of information concerning the philosophy guiding the memorial landscape's design. Olmsted wrote lengthy letters to the Indiana Lincoln Union (ILU), the quasi-governmental body responsible for establishing the memorial park.

Olmsted's correspondence with the ILU contained detailed discussion of the framers' concept of the park, as well as considerable insight into the feelings of those involved. The collection also contained several of Olmsted's drawings and sketches, which served as a baseline for determining how faithfully the master designer's concepts were followed.

Once the ILU accepted Olmsted's preliminary design, they passed responsibility for development of construction drawings to the Indiana Department of Conservation (DOC), now the Department of Natural Resources. This change resulted in a dramatic decrease in written information concerning how decisions were made; once the project was contained in one office, it was easy to resolve issues in person or by telephone. Nevertheless, the Indiana State Library, Indiana State Archives, and Department of Natural Resources manuscript collections contained valuable information concerning the project, including a wealth of original designs by the two Department of Conservation landscape architects assigned to the project. I obtained copies of Department of Agriculture aerial photographs from 1937 and 1940. In addition, the park museum

(continued on page 8)

Research Benefits Management
(continued from page 7)

collection held many documents and photographs relating to the Indiana Lincoln Memorial's establishment, and a scrapbook of historic postcards featuring the park donated by a park neighbor whose husband and father had both worked at the memorial prior to its inclusion in the National Park System.

I searched the files hoping to find a single design representing the landscape which the Department of Conservation eventually put in place. Unfortunately, fate did not make my work that easy. It seems the DOC did not implement any single landscape design, probably because the formal landscape evolved over a 15-year period (1929-1944). I had to reconstruct the events which took place a half-century earlier to determine what the landscape looked like historically. To perform my analysis, I made note cards for each of the designs and summarized which elements were original, which showed up in more than one plan, and which seemed to match existing conditions and/or historic photographs of the memorial grounds.

The types of information I employed in this project were threefold. Documentary sources, including photographs and drawings, provided a firm foundation in the historical record. I used existing conditions at the park to "sort out" elements which appeared on paper but were never implemented, or were implemented in an altered form. Finally, I talked to people. Sometimes using formal interviews, sometimes just chatting about what I was finding and letting my sources tell me what they remembered or surmised, these oral sources helped me formulate hypotheses, test them, and tie the separate pieces of information together.

Recommendations

In addition to the summary of research findings, the historic grounds report contained a section on management recommendations. These recommendations were based on my findings concerning the original intent, design, and implementation, and were developed in accordance to NPS Management Policies and NPS-28, Cultural Resource Management Guideline. Equally important, they were developed in close communication with Superintendent Hellmers and his staff. The park was well aware of what my research had determined, and that I knew the constraints affecting the park's ability to use the research information.

The historic grounds report served other purposes in addition to providing historical background and suggestions concerning future management of the cultural landscape. Once the regional director approved the document and the superintendent elected to implement the recommendations, the document served as a base for the landscape architect assigned the task of preparing construction drawings and specifications.

Equally important, the report provided the Superintendent with an important public relations tool. The restoration of the landscape at Lincoln Boyhood would result in significant change to the appearance of a focal area of the memorial park. Some of the actions required to accomplish the restoration might prove controversial; for example, it would involve the removal of several large trees, some of them healthy. The report explained the rationale for removing all of the original specimens in order to restore the intended uniform appearance of the allee, plaza, and court. It explained why popular ornamentals, such as the Japanese cherries added to the flag court in the 1960s, were not appropriate to the original intent of the memorial grounds and would be removed. Using the historic grounds report, Superintendent Hellmers conducted a public relations campaign that succeeded in winning support for the restoration before demolition and construction work began. The document was also valuable in ensuring that park staff understood the history of the landscaping project and reasons for the change, thus enabling them to add the story to their interpretive programs. In the fall of 1987, the plans were implemented, resulting in the complete removal of all existing vegetation in the landscape area, and the planting of 91 trees, 421 shrubs, and 504 groundcover plants.

The importance of this project goes beyond the immediate goal of restoring the memorial grounds at Lincoln Boyhood National Memorial. Although the details of the research and analysis were, in some ways, unique due to the type of resource under investigation, the lessons of the project are universal. Most restoration projects begin much more subtly; our bolts of lightning are usually figurative, not literal. Many managers and park staff members see things that do not "ring true." The difference, in this case, is that Norm Hellmers did not walk away, or shrug them off. He determined to make the situation right, and to do what was needed to accomplish that goal. That meant research. He stayed involved in the project from its inception to its completion. He used the information to guide the work itself, and to educate the public and his staff concerning the resource, its history and significance, and its restoration. Thus, the research provided direct benefits to the manager and to his park.

Jill York O'Bright is regional historian for the Midwest Regional Office, National Park Service.



Memorial grounds after landscape restoration, 1988. Photo courtesy Lincoln Boyhood National Memorial.

AAM Accreditation Program

Patricia E. Williams

The American Association of Museums (AAM) accreditation program recognizes museums that have achieved and maintained professional standards in museum operations and programs. The program was established in 1969 when it became evident that increased funding opportunities, growing leisure time, an expanding educated population and the desire for community-based cultural opportunities had nourished the growth of the museum field. It was clearly time for the museums to look at themselves to determine what the basic standards were for good museum practice. Museums share common goals as part of the informal educational system. They share common characteristics which can be identified, described and measured. It is particularly appropriate that academic accreditation was identified as a good model to follow in developing a peer review program for museums. All of the elements of academic accreditation are incorporated into the museum accreditation system: self study; internal evaluation by staff and governing authority; peer review by a team of qualified museum professionals; and final review by an accrediting body made up of senior museum professionals. Each step in the process is important and has its own positive benefits. In 1986, the National Park Service Director issued a memorandum encouraging NPS areas to seek AAM accreditation and providing NPS-specific procedures to initiate the process. Prior to introducing this initiative, the NPS had sought evaluation of its museum-related functions in the Washington Office and two representative regional offices in conjunction with the accreditation of Independence National Historical Park. This Servicewide review has facilitated subsequent accreditation reviews in individual parks because the reviewers have not needed to examine, in detail, the Servicewide policies and procedures.

Many museum directors cite the self-study phase of accreditation, which can take up to one year, as being of the most immediate help to the museum. Once the self-study is completed, the professional staff members at the AAM review the documents and submit the museum to the Accreditation Commission for its review and action.

"The self-study allowed us to look at all aspects of the home (its grounds, the structures, the artifacts, the maintenance and interpretation) as an entity. The process afforded many specialists the opportunity to interact and strengthen relationships and develop a deeper understanding of other specialties and the Park Service mission."

—Pam West (speaking on the accreditation process at the Frederick Douglass National Historic Site, Washington, DC), Regional Curator for the National Capital Region of the National Park Service.

This is the first opportunity for the peer review aspect of the program to be employed. The seven-member commission includes: Roy L. Taylor, Director, Chicago Botanic Garden and Chairman, Accreditation Commission; Marena Grant Morrisey, Director, Orlando Museum of Art; Bonnie Pitman-Gelles, Director for Programs, Seattle Art Museum; Dennis Wint, President, St. Louis Science Center, Harold K. Skramstad, President, Henry Ford Museum and Greenfield Village; Kenneth Starr, Director of Programs, National Science Foundation; and Daniel Porter, Director, New York State Historical Association. The Commission members carefully read and analyze the museum's self-study document and inspect all the attachments. Questions or issues that arise at this stage are usually resolved by the on-site evaluation which is the next step in the program. The museum and the AAM staff work together selecting a two-person team to make the on-site evaluation. National Park Service museums are challenging undertakings, especially in the area of governance. The selection of an appropriate visiting committee is particularly critical to maintaining confidence in the program and the final results of the visit—the narrative report.

The Accreditation Commission now reviews the museum for a second time. One member of the commission takes responsibility for thoroughly reading the museum's self-study again and for studying and analyzing the on-site evaluation questionnaire and narrative report. Based on the documentary evidence submitted, the commissioner prepares a recommendation for action which is the basis for discussion by the full Accreditation Commission.

Each phase of the accreditation program is designed to meet three goals: give museums the opportunity to improve their operations and programs; provide a system for reliable and valid review and evaluation; and involve colleagues from the museum field in every level of the review process.

Benefits

It is always a challenge to discuss the benefits of accreditation because they are largely those that the museum creates for itself. Many institutions use it to achieve an increased funding base.

"Through the accreditation process, all those associated with the Foundation learned to focus on the priorities of the museum and to plan adequately for their future. Then, by achieving accreditation, we sent a very important and timely message to the legislature, i.e., that such a large increase in its investment in the Foundation is indeed merited."

—Ross Weeks, Jr., Director, Jamestown-Yorktown Foundation.

(continued on page 10)

AAM Accreditation Program
(continued from page 9)

Most museums use the materials provided by AAM to publicize their hard-won accredited status to the press and public. The achievement of accreditation may not bring hundreds of new visitors or thousands of new dollars. However, museums, both public and private, consistently tell us about how accreditation builds confidence, a sense of pride, a feeling of real accomplishment.

The White House accreditation is particularly noteworthy because this museum is cooperatively managed by the White House and the National Park Service with private support coming from the White House Historical Association and advisory guidance from the Committee for the Preservation of the White House. This complex and collegial relationship works very smoothly as was evident in the museum's self-study and on-site evaluation. The accreditation review gave the museum an opportunity to strengthen these cooperative ties and to evaluate their effectiveness. It also gave each participating organization an opportunity to recognize its level of commitment and service to the museum. The positive results of the review gave everyone well-deserved praise.

Museums face enormous challenges: the balancing act between conservation and public use; the demand to carry on research in the face of pressures to do more public programming; the definition and building of appropriate collections with shrinking budgets. Accreditation helps museums to see these issues in perspective and to look at the whole institution in the context of current professional standards. Working toward accreditation can build an incredible sense of institutional teamwork; working to maintain accreditation can sustain the interest and commitment of staff, volunteers and officials.

"The visit to the off-site museum storage facility by the AAM's accreditation visiting committee provided us with an independent professional review and assessment of our facility, storage procedures and practices. It gave us the opportunity to discuss our immediate and long range plans to improve the storage facility and to demonstrate our, and the National Park Service's, continued concern and efforts to meet the highest standards for museum collection storage. We anticipate that the accreditation report will address issues raised during the on-site visit that may provide additional support necessary to implement these goals and objectives."

—Rick Napoli, Curator for Off-site Storage, The White House.

"The accreditation review was an in-depth self-examination of all museum and park functions in an attempt to achieve the highest professional standards set by the museum community."

—Fred Sanchez, Andersonville (GA) National Historic Site.

Accreditation is by and for the museum field. Participation is a way of building ties with the field and achieving an identity for the museum within the profession. National Park Service museums benefit the community both by sharing their methodologies and program approaches with the field and by sharing personnel who serve on the Accreditation Visiting Committee and as consultants in other AAM activities, such as the Museum Assessment Program.

National Park Service accredited museums are in turn benefitted by recognition as full players in the museum field, as critical participants and leaders in the effort to conserve and interpret national patrimony, and as worthy of public and private support.

To date, the AAM has accredited 673 museums, including the following NPS areas:

	Year Accredited
Jefferson National Expansion Memorial	1980
Independence National Historic Park	1985
Andersonville National Historic Site	1987
Frederick Douglass National Historic Site	1988
The White House	1988

Other NPS areas are encouraged to contact their regional curators to initiate the accreditation process for their museum-related operations.

Patricia E. Williams is Director of the Accreditation Program for the American Association of Museums.

CRM Planning

Resource Management Plan Update

Since the draft Resource Management Plan guidelines were issued in May 1988, regions have been busy developing "model" plans. By early December, plans had been received from Mesa Verde, Gulf Islands, and Mammoth Cave. Since then, George Washington Carver, Saratoga, and Yukon Charlie also have submitted plans. On February 1, 1989, representatives from each regional office met with the WASO task force to review the final changes in the draft guidelines. It was expected that the final guidelines would be issued by the end of February 1989. A training course in the implementation of the guidelines is scheduled for Mather on March 29-30, 1989.

Assessing the Status of Historical Research and Writing in the National Park Service—Update

As part of the historians' special issue (February 1988), a comprehensive questionnaire was sent out to all recipients of the *CRM Bulletin*. Approximately one percent of the total *Bulletin* readership responded and submitted completed questionnaires. Regional Historian Michael Schene developed a computer program using dBASE III-Plus to analyze the questionnaires. Regional Historian Stephanie Toothman, who designed this survey, will present a preliminary report at the forthcoming Historians' Workshop in April 1989. The final results of this survey will be published in a future issue of the *Bulletin*.



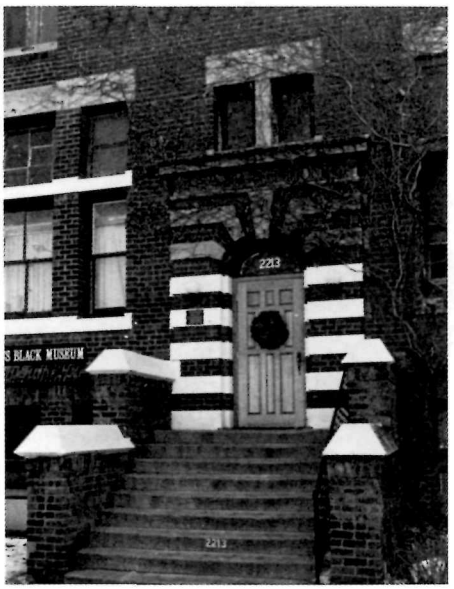
Black History Preserved



Jubilee Hall, Fisk University



Dunbar Hospital



Webster Telephone Exchange Building



Durham Hosiery Mill



Mutual Musician's Foundation Building



North Carolina Mutual Life Insurance Company Building





Mechanicsville Historic District



Ralph Bunche House



Maggie Walker House



Freedmen's Town Historic District



John Roosevelt "Jackie" Robinson House



Old Bethel United Methodist Church



Brown Chapel African Methodist Episcopal Church



Old Bethel United Methodist Church (Interior)

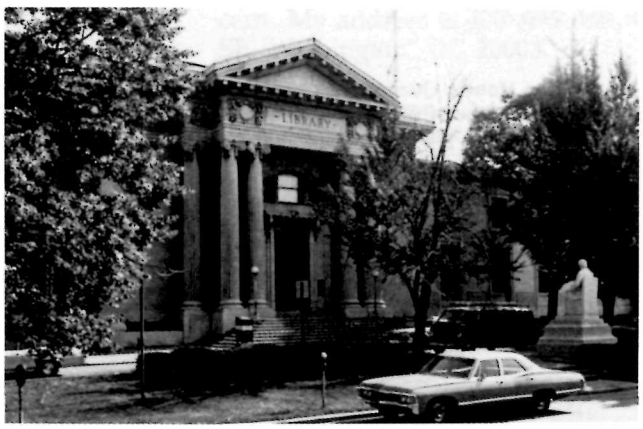


Mount Zion Cemetery



Tucker's Grove Camp Meeting Ground

(See page 14 for property descriptions.)



Louisville Free Public Library



Jubilee Hall, Fisk University, Nashville, TN. The school was founded by the American Missionary Association to offer a liberal arts education to Blacks after the Civil War. Jubilee Hall is the oldest building on campus. Photo by the Historic American Buildings Survey, National Park Service.

Dunbar Hospital, Detroit, Michigan, is significant for its role in the development of the medical profession in the Black community of Detroit in the early 20th century. It is also important as the home of two of Michigan's first Black men to hold high elective political offices. Photo by Geraldine V. Harris, 1979.

Webster Telephone Exchange Building, Omaha, Nebraska, is located in the center of the Black Community. The building has served as a community center and is now the Great Plains Black Museum, founded to preserve the Black heritage of the area. Photo by D. Murphy, from the Nebraska State Historical Society, 1976.

The Durham Hosiery Mill, Durham Co., NC, was the first mill in the United States which employed a solely Black work force. The original Durham Hosiery Mill building was completed in 1902 by the Durham Hosiery Mills Corporation, which by 1910 was the largest manufacturer of cotton hosiery in the world. Photo by JoAnn Sieburg-Baker, from the Division of Archives & History, Raleigh, NC. 1978.

Mutual Musician's Foundation Building, Kansas City, MO, was a significant center for the development of jazz, particularly the "Kansas City Style," one of America's indigenous musical expressions. The building was purchased in 1928 by the former all-Black Musician's Union Local #627 for their organizational headquarters. Many of the Nation's leading jazzmen were or are members of #627 including band leader Bill "Count" Basie, trumpeter "Hot" Lips Page, and drummer Baby Lovett. Photo by Sherry Piland, from the Kansas City Landmarks Commission, 1977.

North Carolina Mutual Life Insurance Company Building, Durham, NC, was the second home on the original site of the NC Mutual Life Insurance Co., which grew from its founding in 1898 to become the Nation's first Black billion-dollar business. Photo from the Afro-American Bicentennial Corporation, 1974.

Mechanicsville Historic District, Knox Co., TN, was the home of a large portion of the Black population who owned and operated businesses in the area and worked in the factories and mills. By 1883, Mechanicsville had a population of over 2,000 people. Photo by Nissa Dahlin Brown, from the East Tennessee Development District, Knoxville, TN, 1980.

Ralph Bunche House, Queens, NY, was the home of Dr. Ralph Johnson Bunche, one of America's outstanding scholars, social scientists, and diplomats. Bunche was the first Black to hold a position in the U.S. Department of State, and was a member of the U.N. Secretariat and negotiator of the Israeli-Arab truce of 1949, for which he became the first Black recipient of the Nobel Peace Prize in 1950. Photo by Richard K. Dozier, 1975.

Freedmen's Town Historic District, Houston, TX, is a 40-block residential area that represents all that remains of the oldest and one of the most important Black communities in Houston. Founded just after Emancipation on the southern banks of Buffalo Bayou, the original Freedman's Town settlement eventually grew to become the economic, spiritual, and cultural focus of Houston's Black community. Photo by Kenneth Breisch, from the Texas Historical Commission, 1984.

Maggie Walker House, Richmond, VA, was the home of a prominent Black community leader and member of the Independent Order of St. Luke, a Black fraternal and insurance cooperative and publisher of the *St. Luke Herald*. Photo from the Virginia Historic Landmarks Commission, 1975.

John Roosevelt "Jackie" Robinson House, Brooklyn, NY, was the home of "Jackie" Robinson in 1947 when his outstanding performance with the Brooklyn Dodgers broke the color barrier in organized baseball and facilitated Black participation in all major league sports. Photo by Thomas Holman, from the Afro-American Bicentennial Corporation, 1976.

Old Bethel United Methodist Church, Charleston, SC, served all members until 1834 when schism caused Black secession. The church was given to the Black congregation in the late 19th century. Photos by William H. Brabham, from the SC Department of Archives & History, 1975.

Brown Chapel African Methodist Episcopal Church, Selma, AL, is the landmark most closely associated with the Southern Christian Leadership Conference 1965 Selma campaign to win equal access to the ballot for Blacks. During the first three months of 1965, the church served as the headquarters for the SCLC, as the site of the rallies conducted by Martin Luther King, Jr. and other leaders of the SCLC, and as the staging point for demonstrations, including the march to Montgomery. Photo by Ellen Mertins, from the Alabama Historical Commission, Montgomery, 1981.

Mount Zion Cemetery, Washington, DC, is composed of two adjacent cemeteries: one established in 1808 by the Montgomery St. Methodist Episcopal Church and acquired in the late 19th century by the Mount Zion M.E. Church which was founded by the Black members of the former church in 1816; and the other established by the Female Union Band Society, a benevolent society founded by free Black women. Photo by William Edmund Barrett for the National Capital Planning Commission, 1975.

Tucker's Grove Camp Meeting Ground, Lincoln Co., NC, was established by Methodist missionary Bishop Francis Asbury to provide for the religious welfare of area slaves. It continued after the abolition of slavery as an A.M.E. Zion campground and reputedly is the oldest continuously operating Black campground. Photo by Randall Page, from the State Department of Archives and History, Raleigh, NC, 1972.

Louisville Free Public Library, Louisville, KY, is believed to be the first free public library built for Blacks in the U.S. Photo by Diane Kane from Louisville Landmarks Commission, 1979.

National Coordinating Committee for the Promotion of History

Page Putnam Miller

Since 1982 the National Coordinating Committee has served as the central advocacy office in Washington for the historical and archival professions. Fifty-one constituent member organizations support and participate in the work of the NCC. Although public historians, librarians, political scientists, archivists, and genealogists are members of the NCC, by far the largest segment of the NCC constituency is composed of academic historians. Housed in the American Historical Association building on Capitol Hill, the NCC advocacy program focuses on those Federal policies that have a direct impact on history. These include the policies and funding of the National Archives and the National Endowment for the Humanities, access to historical records, as well as Federal historic preservation policies and the historical component of the National Park Service.

A primary task of the NCC legislative program is to facilitate the exchange of information between government agencies, legislative aides, and professional historical and archival associations. This involves preparation of briefing sheets and legislative updates as well as testifying before congressional committees and providing NCC member organizations with advocacy related services. The NCC works closely with the American Historical Association's Professional Division, the Public History Committee of the Organization of American Historians and the National Council on Public History to increase awareness and appreciation of historic sites. Through a variety of initiatives, the NCC organizations work to promote the preservation, research, and study of historic structures and artifacts that serve as visible reminders of significant events, persons, and movements in this Nation's history.

Whenever appropriate, the NCC urges the National Park Service to place a greater priority on historical research. Research is the foundation necessary for an accurate portrayal of historic events and for adequate preservation of fragile resources. The goal is to both strengthen the historic resources knowledge base and to integrate this information into the total management efforts of the National Park Service. These are points that the NCC has made in Congressional testimony and in comments on National Park Service "Management Guidelines."

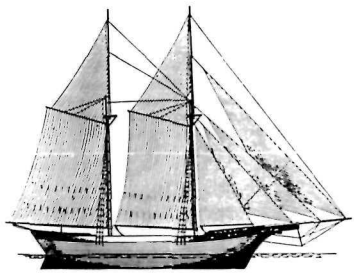
Almost three years ago the NCC, the Organization of American Historians, and the National Park Service signed a memorandum of agreement to sponsor a women's history landmark project and the NCC began preliminary work on the Project. Discussion during a 1988 Congressional hearing on the operation of the National Historic Landmarks program and the selection and development of landmark theme studies led the House Committee on Interior and Insular Affairs to recommend that "the National Park Service establish an ongoing and substantial cooperative effort with the major professional and scholarly societies to research and publish National Historic Landmark theme studies." The NCC/NPS collaborative is a demonstration of this recommendation. The goal of the project, "Reclaiming Our Past: Landmark Sites of Women's History," is threefold: to increase the number of National Historic Landmarks that commemorate the experiences of women (less than 5% now focus on women), to develop theme essays that integrate the tangible resources of women's past with recent scholarship on women's history; and to involve the wider scholarly and preservation communities in the landmark program.

The NCC is based on organizational and not individual membership. Yet individuals do provide essential support for NCC. They do so by encouraging organizations to which they belong to join, and financially support, the NCC; and they participate in various NCC task forces and initiatives. If you have an interest in the women's landmark project or if there are specific issues regarding the National Park Service or Federal historic preservation policies that concern you, please let me hear from you. I depend on a wide network of historians and CRM supporters to keep me posted on old and pending matters of concern. My address is 400 A Street, SE, Washington, DC 20003.

Page Miller is Director of the National Coordinating Committee.

Dogwatch

James P. Delgado



"Dogwatch" is the term traditionally used for the two-hour watch during which half the ship's crew eats supper and swaps stories.

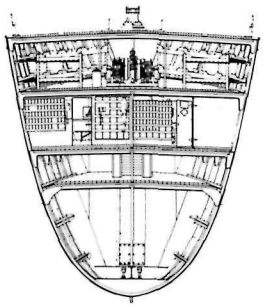
Throughout history, ships were built without detailed plans. At best, naval architects drew "line" plans that delineated the form of a ship's hull; deck plans that showed the layout of deckhouses, hatches and equipment; rigging plans that documented spars and sails; and with the advent of steam, engine plans were prepared. By the mid-19th century, the intricacies of steam propulsion and iron and steel shipbuilding combined to make shipbuilding more science than art, resulting in the preparation of more drawings and plans of vessels. Even today, though, most vessels are still built without plans.

Even when drawn, plans of ships fail to capture every detail, particularly the means by which the vessel is constructed. Plans also often represent what was initially desired by the shipbuilder, not what was built. Changes to a vessel can be understood only by comparing drawings of modifications and repairs to a ship that were done over time. Large, bulky, difficult to conserve and curate, sometimes surviving as archivally unstable "blueprints," ship plans are a dwindling resource. Many of the historic vessels preserved in the United States have few if any plans, making restoration difficult. The only record of these vessels is the ship itself, and should it sink, burn, or fall apart, an irreplaceable part of the past is lost forever.

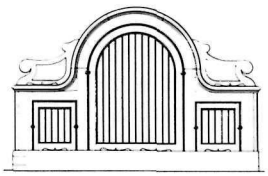
Guidelines

During a 14-month period in 1936-37, the Historic American Merchant Marine Survey (HAMMS) drew and photographed 426 vessels in the United States. In 1989, only one of the 426 survives, clearly demonstrating the fragile nature of historic ships. The only record that survives for many of the others is the HAMMS drawings. That fact is not lost on the Nation's maritime preservation community, who pushed for a revival of HAMMS and for guidelines to record historic ships. As part of the Congressionally mandated "National Maritime Initiative," the NPS, working with the National Trust for Historic Preservation and the maritime community "revived" HAMMS under the auspices of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER). In cooperation with the Calvert Marine Museum, Mystic Seaport, the Shelburne Museum, Northwest Seaport, and San Francisco Maritime National Historical Park, HABS/HAER teams under the direction of Richard K. Anderson, Jr., documented the historic ships *Wawona, Louise Travers, Ticonderoga, Alabama,* and *Balclutha* between 1985 and 1988. Drawing on this experience and HABS/HAER's years of expertise in documenting historic structures and engineering, NPS released the long-awaited *Guidelines for Recording Historic Ships* in January 1989. The Guidelines discuss the preparation of historical context studies, historical reports, case studies, documenting ships with large-format photography, and the preparation of measured drawings. Lavishly illustrated with HAMMS and HABS/HAER drawings, and replete with examples of completed work, the guidelines are an absolute necessity for maritime preservationists, historians, naval architects, maritime archeologists, and preservation agencies and organizations who are studying, documenting, restoring or rehabilitating historic ships.

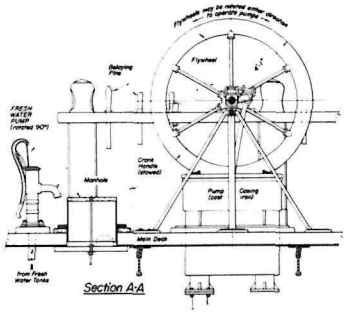
The Guidelines are available, free of charge, and can be obtained by writing HABS/HAER, National Park Service, P.O. Box 37127, Washington, DC 20013-7127.



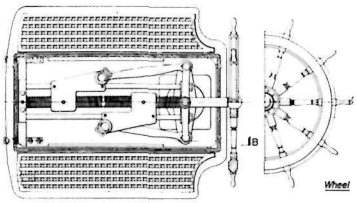
SECTION AT FRAME 108



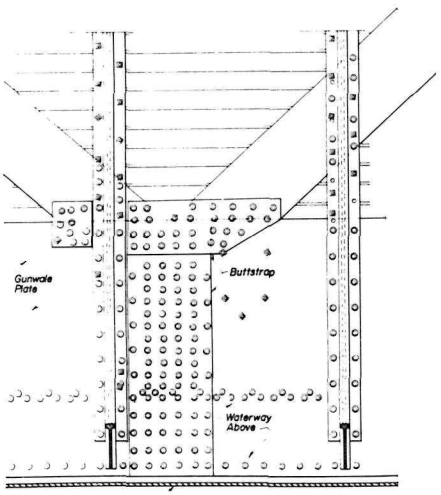
SALOON SKYLIGHT



BILGE PUMPS



STEERING GEAR



DECK STRUCTURE DETAILS

Jim Delgado is the maritime historian in the History Division, National Park Service, Washington Office.

NPS Preservation Technology Publications

Kay D. Weeks

Mandate for technical information. Issued in 1971, Executive Order 11593 ("Protection and Enhancement of the Cultural Environment"), directed the Secretary of the Interior to "develop and make available to Federal agencies, State and local governments, private organizations and individuals information concerning professional methods and techniques for preserving, improving, restoring, and maintaining historic properties." This mandate was expanded in the 1980 amendments to the National Historic Preservation Act of 1966: Section 101(h) called for the development of technical information for other nations and international organizations and stipulated that training be provided for administrators of the historic preservation program at the Federal, State, and local levels.

In response, 70 titles since 1973. Responding to this mandate, the NPS established a separate office, the Preservation Assistance Division, to develop preservation standards, guidelines, and technical information; its first technical report, a 38-page, typewritten paper on the use of rectified photography for working drawings, surveys, and feasibility studies was published in 1973. Now, some 15 years later—supported both by the strengthened 1980 Act and the continuous technical editorship of Lee H. Nelson, FAIA—the office claims nearly 70 preservation guidance publications (technical briefs and reports, case studies, and cooperatively produced handbooks and workbooks). While consciously tailoring publication formats to audiences of differing conservation skills and interests, the guidance consistently reflects and underscores the philosophy expressed in the Secretary of the Interior's Standards.* Today's list of 70 also includes the more "administrative" publications that describe and explain program activities—leaflets and bulletins on the Tax Incentives and National Historic Landmarks programs, publication catalogs, routinely updated fact sheets and, of course, the Standards and Guidelines themselves. Most recently added was a skills development training handbook targeted to historical architects and other preservation professionals within the Park Service.

Readership has grown over the years as well—in large measure due to the popular Preservation Tax Incentives Program—from a "core audience" of Federal agency

(continued on page 18)



*"The Secretary of the Interior's Standards for Historic Preservation Projects (1979)" include general and specific Standards for the treatments acquisition, protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. "The Secretary of the Interior's Standards for Rehabilitation with Guidelines for Rehabilitating Historic Buildings (Rev. 1983)" is issued as a separate publication.

Preservation Technology Update will be a regular feature of the **CRM Bulletin** beginning with this issue. Its focus will be the technical aspects of preserving and maintaining cultural resources and will incorporate the Feedback column that has been featured in previous bulletins. Contributors are: H. Ward Jandl, Michael J. Auer, Anne Grimmer, Camille Martone, Sharon Park, and Kay D. Weeks.

managers, State Historic Preservation Officers, and National Historic Landmark owners to a broad nationwide constituency of historic property owners, architects, developers, contractors, historic preservation commissioners, and students.

Finally, the change in distribution practices during the 15-year program is well worth mentioning. In the 70s and early 80s the Division routinely printed 20,000-40,000 copies of each Preservation Brief for distribution to its mandated audiences, then reprinted annually in numbers equally as high. The Standards and Guidelines were distributed in figures approaching 200,000. Then, toward the mid-1980s it became increasingly clear that the high cost of printing coupled with the growing number of publications in print was making free distribution an economic impossibility. (Today, for example, it costs about as much to reprint 8,000 Briefs as it did to reprint 15,000 in the earlier program years.) In the more recent years of limited free distribution, Preservation Assistance Division has turned increasingly to sales as an alternative to free distribution, and the Superintendent of Documents, U.S. Government Printing Office (GPO) as its sales outlet of choice. GPO prices are low, particularly when publications are ordered in quantity. Currently, the Division has 26 publications at GPO; the others are sold by the Department of Commerce's National Technical Information Service, the National Trust for Historic Preservation, the American Association for State and Local History, and the Historic Preservation Education Foundation.

Preservation guidance for every audience. Several technical information categories have subsequently evolved to distinguish between types of subjects being explained, levels of technical difficulty, and audiences of differing preservation skills and interests:

Preservation Briefs: Short, illustrated essays in bulletin form intended to build general preservation awareness on broad issues. 18 Briefs to date, including guidance on sandblasting, interior rehabilitation, use of substitute materials, and new exterior additions. Newest titles include **PB 15: Preservation of Historic Concrete** by William B. Coney, AIA; **PB 16: The Use of Substitute Materials on Historic Building Exteriors** by Sharon C. Park, AIA; **PB 17: Architectural Character–Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character** by Lee H. Nelson, FAIA; and **Character-Defining Elements** by H. Ward Jandl.

Technical Reports: Book-length essays that address more sophisticated and sometimes experimental preservation and conservation methodologies, targeted to architects, engineers, government officials, and other technicians involved in the preservation of historic buildings. 13 titles to date, newest is **Keeping it Clean: Removing Dirt, Paint, Stains, and Graffiti from Historic Exterior Masonry** by Anne E. Grimmer.

Preservation Case Studies: Solution-oriented information for developers, planners, and owners focusing on one building or a block of buildings. 8 titles, newest is **The Interior Building – Its Architecture and Its Art** by David W. Look and Carole L. Perrault. Available from GPO.

Preservation Tech Notes: Short, illustrated essays providing innovative solutions to specific problems encountered in preserving or rehabilitating cultural resources. 22 titles to date; primarily distributed in the CRM Bulletin. Also sold as part of PAD's Co-Publications (see below).

Training Handbooks and Workbooks: Specially prepared for national conferences on preservation technology (Window Conference, 1986; Interiors Conference, 1988). These 100 to 400 page notebooks are cooperatively published with leading preservation organizations. Newest titles include **The Interiors Handbook for Historic Buildings; The Window Handbook: Successful Strategies for Rehabilitating Windows in Historic Buildings; and the Window Workbook for Historic Buildings.** Each is available from the Historic Preservation Education Foundation. For ordering information, call Chuck Fisher: (202) 343-9568. The **Skills Development Plan for Historical Architects in the National Park Service** is a 96 page guide outlining the self-paced training program for architects and other preservationists with the goals of studying a topic, writing about it, and sharing information with an audience of peers.

For a **Catalog of Historic Preservation Publications** (a complete list of GPO, other sales, and free publications developed by the Cultural Resources Programs), write: CRM Bulletin, ATTN: Kari Koester.

Seeking authors of new technical publications. Technical preservation publications are developed by WASO staff, the NPS regions, and private sector preservationists. The Preservation Assistance Division encourages "outside" authors to contribute their expertise in the development of technical information. For further information, contact Division at 202-343-9578.

Do you have information to contribute to Preservation Technology Update or suggestions for future articles? Write: Technical Preservation Services Branch, Preservation Assistance Division, National Park Service, P.O. Box 37127, Washington, D.C. 20013-7127.

Bulletin Board

Conferences, Workshops, Training Courses

May 17-20, 1989: Sacred Trusts II: Money, Materials and Management
The second national conference on preserving historic religious buildings. Contact: Historic Designation Advisory Board, 202 City County Building, Detroit, Michigan 48226 (313) 224-3487.

May 18-19, 1989: Paint in America: A Symposium on Architectural and Decorative Paints
The Society for the Preservation of New England Antiquities and the Barra Foundation are sponsoring a symposium in Lexington, MA, on the nature, use, and conservation of architectural and decorative paints in America from colonial times. Contact: SPNEA Conservation Center, 185 Lyman Street, Waltham, MA 02154 (617) 891-1985.

June 15, 1989: Rehabilitation and Restoration of Windows in Historic Buildings
Sponsored by the National Park Service and New York Landmarks Conservancy this workshop will cover condition evaluation, building codes and standards, repair techniques, upgrading procedures and upgrading options. Workshop will be held in conjunction with historic window exhibit at New York City's Federal Hall National Memorial. Contact: Charles Fisher, National Park Service, P.O. Box 37127, Washington, DC 20013-7127 (202) 343-9578.

August 1-5, 1989: First International Conference on Civil Engineering History and Heritage
Conference sponsored by the American Society of Civil Engineers in College Park, MD. Contact: Herb Hands, Manager, Historical Activities, American Society of Civil Engineers, 345 E. 47th Street, New York, NY 10017 (212) 705-7223.

August 7-9, 1989: Techniques for Dating Historic Structures
Workshop focuses on recognizing architectural changes, evolution of molding styles, hardware, window and door treatments, framing methods. Contact: Eastfield Village, Box 143 R.D., East Nassau, NY 12062.

August 14-18, 1989: Techniques in Restoration Carpentry—Window Restoration and Timber Frame Restoration
Workshops will study tools and techniques used in restoration work and will include work on actual projects. Contact: Eastfield Village, Box 143 R.D., East Nassau, NY 12062.

August 28-September 1, 1989: Plastering: Flat Wall and Ornamental
Workshops will focus on traditional techniques, as well as use of modern tools. Contact: Eastfield Village, Box 143 R.D., East Nassau, NY 12062

September 4-9, 1989: 1989 Annual conference of the Association for Preservation Technology (APT)
The 1989 APT conference will be held in Chicago, IL, focusing on "technical creativity in the planning and implementation of preservation." Short courses on concrete and high-rise buildings. Contact: APT 1989 Program Chair, c/o Small Homes Council, 1 East St. Mary's Road, Champaign, IL 61820 (217) 333-1801.

1989 Series: Introduction to Federal Projects and Historic Preservation Law
This 3-day course, sponsored by GSA and the Advisory Council on Historic Preservation, is held several times a year in various locations. Contact: GSA Training Center, P.O. Box 15608, Arlington, VA 22215 (703) 557-0986.

February 2-3, 1990: The Role of the Architect in Historic Preservation: Past, Present, and Future
A national symposium to be held in Washington, sponsored by the American Institute of Architects, in celebration of the centennial of the AIA's formal commitment to historic preservation. Contact: Committee on Historic Resources, AIA, 1735 New York Ave. N.W., Washington, DC 20006 (202) 626-7452.

Works in Progress/ Assistance Needed

Subject: Preservation Brief on the rehabilitation and maintenance of historic barns. **Information needed:** photographs and/or drawings of reuse projects that retain historic interiors. **Contact:** Michael Auer, PAD-424, National Park Service, P.O. Box 37127, Washington, DC 20013-7127 (202) 343-9594.

Subject: Bronze statuary repair at Vicksburg, MS. **Information Needed:** successful solutions repairing bronze statuary suffering from extensive deterioration due to impurities in the material, its relatively thin skin, and cracks and rust problems that develop. **Contact:** Paul Hatchett, Historic Architecture Division, Southeast Regional Office, National Park Service, 1980 Island Ford Parkway, Dunwoody, GA 30350 (404) 396-2360.

Subject: Preservation Brief on replacing historic wooden shingle roofs. **Information Needed:** photographs showing installation of appropriately designed wooden shingles; photographs of interesting examples, details, and local craft practices. **Contact:** Sharon Park, AIA, PAD-424, National Park Service, P.O. Box 37127, Washington, DC 20013-7127 (202) 343-9587.

Subject: Use and Repair of Iron Windows. **Information Needed:** Examples of successful repairs in salt-water environment. **Contact:** Chuck Fisher, PAD-424, National Park Service, P.O. Box 37127, Washington, DC 20013-7127 (202) 343-9568.

Subject: Cleaning interior wood and masonry surfaces of mill buildings. **Information Needed:** Successful, cost-effective examples. **Contact:** Bob Powers, Mid-Atlantic Regional Office, National Park Service, Second and Chestnut Streets, Philadelphia, PA 19106 (215) 597-2284.

Subject: Development of 8 videotapes and accompanying study guide to train non-archeologists in identifying and evaluating cultural resources. **Needed:** parties interested in contributing to "lesson" on regional cultural resources in California, Southeast, Plains, Pacific Northwest, Arctic, Hawaii/Pacific, Midwest. To volunteer, or for information on availability of services. **Contact:** Michael J. Kaczor, USDA, Soil Conservation Service, Room 6137-S, Economics and Social Sciences Division, P.O. Box 2890, Washington, DC 20013 (202) 447-6360.

Subject: Paint failure in damp environments. **Information Needed:** successful case studies that can be used by NPS for training personnel. **Contact:** Barry Caldwell, Southeast Regional Office, National Park Service, 1980 Island Ford Parkway, Dunwoody, GA 30350 (404) 396-2360.

Subject: Preservation Tech Note on protecting historic properties from adjacent new construction. **Information Needed:** examples where adjacent new construction has caused damage to historic buildings. **Contact:** Camille Martone, PAD-424, National Park Service, P.O. Box 37127, Washington, DC 20013-7127 (202) 343-9586.

(continued on page 20)

Bulletin Board
(continued from page 19)

Services

Federal Archeology REPORT. In an effort to improve information exchange about Federal archeology, both within the government and with archeologists outside government and with the general public, the Archeological Assistance Division, National Park Service, has begun to produce a newsletter entitled "Federal Archeology REPORT." The REPORT announces upcoming activities and meetings and other information on topics of interest or concern, including longer topical pieces. Address all inquiries and mailing list additions to: REPORT, Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127.

Architectural Bibliographies. Vance Bibliographies, Inc. has over 650 bibliographies (3 to 60 page reading lists ranging from $3 to $15) in its ARCHITECTURE SERIES. Dating from 1986 to the present, the bibliographies include many preservation and rehabilitation topics of interest to cultural resource managers: advances in seismic building design, stucco and plasterwork, shoring and underpinning, landscape protection, building diagnostics, to name a few. For a complete listing of individual bibliographies in the Architecture Series, write: Vance Bibliographies, 112 No. Charter St., P.O. Box 229, Monticello, IL 61856.

Masonry Products for Historic Buildings: Technical Preservation Database. Under a cooperative agreement between the NPS and the Center for Architectural Conservation at the Georgia Institute of Technology, a list of products used on the exterior of historic masonry buildings has been compiled. Although few of these products are manufactured specifically for application to historic masonry surfaces, many of them are used on historic masonry. A print-out of the list was published in September 1988, and includes almost 100 products. Entries are arranged alphabetically by product name. Individual treatment categories include: bonding agents, chemical cleaning products, consolidants, paint removers, and water-repellent and waterproof coatings. An index of product names and types is also included. Copies of the print-out are available at a cost of $7 from: Center for Architectural Conservation, College of Architecture, Georgia Institute of Technology, Atlanta, GA 30332 (404) 894-3390.

Feedback

Precautions with using Inorganic Arsenical Pressure-Treated Wood

Wood treated under pressure with a variety of pesticides is frequently used in historic preservation projects: in porches, gazebos, docks, sill plates, wooden foundations, telephone poles, and other applications where insect attack is likely. Approximately 60 percent of all pressure-treated wood sold is treated with arsenic compounds such as CCA (chromated copper arsenic), ACA (ammoniacal copper arsenic), and ACZA (ammoniacal chromated zinc arsenic). Since the use of treated wood is not without risk, the following consumer information sheet was developed by the American Wood Preservers Institute, the Society of American Wood Preservers, and the National Forest Products Association, in cooperation with the U.S. Environmental Protection Agency (EPA). It is reprinted here in its entirety. By agreement with EPA, wood "treaters" provide copies of this notice with all bundles of treated wood, and with all invoices to retailers. "Treaters" have also agreed to encourage retailers to provide copies to customers, although retailers are not required to do so. For further information contact: American Wood Preservers Institute, 1945 Old Gallows Road, Suite 550, Vienna, Virginia 22182

Consumer Information Sheet: **Inorganic Arsenical Pressure-Treated Wood** (Including: CCA, ACA, and ACZA)

Consumer Information

This wood has been preserved by pressure-treatment with an EPA-registered pesticide containing inorganic arsenic to protect it from insect attack and decay. Wood treated with inorganic arsenic should be used only where protection is important.

Inorganic arsenic penetrates deeply into and remains in the pressure-treated wood for a long time. Exposure to inorganic arsenic may present certain hazards. Therefore, the following precautions should be taken both when handling the treated wood and in determining where to use or dispose of the treated wood.

Use Site Precautions

Wood pressure-treated with waterborne arsenical preservatives may be used inside residences as long as all sawdust and construction debris are cleaned up and disposed of after construction.

Do not use treated wood under circumstances where the preservative may become a component of food or animal feed. Examples of such sites would be structures or containers for storing silage or food.

Do not use treated wood for cutting-boards or countertops.

Only treated wood that is visibly clean and free of surface residue should be used for patios, decks and walkways.

Do not use treated wood for construction of those portions of beehives which may come into contact with the honey.

Treated wood should not be used where it may come into direct or indirect contact with public drinking water, except for uses involving incidental contact such as docks and bridges.

Handling Precautions

Dispose of treated wood by ordinary trash collection or burial. Treated wood should not be burned in open fires or in stoves, fireplaces, or residential boilers because toxic chemicals may be produced as part of the smoke and ashes. Treated wood from commercial or industrial use (e.g., construction sites) may be burned only in commercial or industrial incinerators or boilers in accordance with state and Federal regulations.

Avoid frequent or prolonged inhalation of sawdust from treated wood. When sawing and machining treated wood, wear a dust mask. Whenever possible, these operations should be performed outdoors to avoid indoor accumulations of airborne sawdust from treated wood.

When power-sawing and machining, wear goggles to protect eyes from flying particles.

After working with the wood, and before eating, drinking, and use of tobacco products, wash exposed areas thoroughly.

If preservatives or sawdust accumulate on clothes, launder before reuse. Wash work clothes separately from other household clothing.



Computer News

Betsy Chittenden

It's no secret that the use of computers and computerized information management systems in the Service has increased rapidly over the last several years. The Cultural Resources programs have been no exception, with information systems proliferating Servicewide. Consider the major systems already either running or under development: there are four primary resource inventories (ANCS, CSI, LCS, and NRIS), two major bibliographic databases (NADB reports and CRBIB), several project inventories (such as NADB projects and HABS/HAER), several special resource-type inventories (such as Spanish Cultural Heritage and National Maritime Inventory), on-line information retrieval systems (such as the Historic Structures Preservation Database), and dozens of other small and medium-sized systems. Major servicewide systems such as COMMON and Maintenance Management also have cultural components.*

With the increase in the use of these important tools has come the increased risk of collecting redundant information or information for which there is no well-defined use, overloading users with numerous different but overlapping systems, developing inaccessible systems, and other problems that result from a lack of coordination. To work on existing problems and head off others before they occur, the Associate Director established a full-time position of Cultural Resources Information Management Coordinator (IMC). This is the first time that a full-time position has been created to coordinate information management, an important step in recognizing the place of computers in the NPS.

In accepting the job of Cultural Resources IMC, I realized that since this is a new function, much of the job is undefined and the mechanisms to carry out coordination functions are still being developed. For example, the data dictionary process, by which we hope to standardize and coordinate cultural resource information, is laid out on paper but still needs to be tested and refined as a working process. Over the next year, I will be working closely with concerned offices and individuals to map out overall information management strategies, develop processes such as data dictionary, and open communication channels to all areas of the National Park System and the National Register programs community. Along with working on the information systems and databases themselves, I will also be concentrating on the "people" side of computers—how personnel and technical support combine to turn software and computers into true information systems.

As a starting point, attached is a draft mission statement for the Cultural Resources IMC function. For the moment this will serve as our working standard as we get specific activities going. Your comments on the draft are welcome. Over the next few months as we begin major work on both the data dictionary and long-range strategic information management planning, you can expect to hear much more about information management in the NPS. I plan to use the *CRM Bulletin* to report accomplishments, raise issues for which I will need feedback and input from you, and to communicate general information about information systems in WASO and servicewide. In return, I hope to hear from all of you about any and all issues related to information management systems. We need to be discussing both our successes and our failures, in order to really put computers to work for us in the NPS. Your input and support will be critical as we work to develop the mechanisms that will help all of us get the most out of our information management systems, and to serve the public as efficiently as possible. I can be reached at FTS 343-9521, or Mail Stop WASO 413.

Cultural Resources Information Management Coordination Function Draft Mission Statement

The Service recognizes the central role that information management, particularly automated information, plays in achieving its mission. The mission of the cultural resources information management coordination function is to enhance the usefulness of cultural resources information management systems by:

— promoting consistency, compatibility, accessibility and transportability of information in cultural resources information management systems throughout the Service;

— promoting consistency, compatibility, accessibility and transportability of information between Service cultural resources information management systems and other organizations, including Federal and state historic preservation programs, private cultural resources programs, and others;

— ensuring that when information systems are being developed or revised, that their value to others in the Service and the larger cultural resources community, including the public, shall be recognized, and incorporated into their design whenever possible; and

— minimizing the cost of developing and maintaining information, and maximizing its usefulness and accessibility to the widest possible appropriate audience.

These objectives are to be attained using methods appropriate to the dispersed nature of information and the cultural resources community, including coordination, communication, cooperative intra- and interagency standardization mechanisms such as data dictionaries, and information exchange mechanisms such as users groups.

---

*ANCS - Automated National Catalog System
CSI - Cultural Sites Inventory
LCS - List of Classified Structures
NRIS - National Register Information System
NADB - National Archeological Database
CRBIB - Cultural Resources Management Bibliography

Capitol Contact

Bruce Craig

The opening of the 101st Congress brought good news for historians. On January 3, 1989, the House of Representatives adopted a package of rules that included the establishment of a permanent "Office of the Historian of the House of Representatives." The House also passed a rule that opened up official House records that previously were closed to scholars.

According to Dr. Page Putnam Miller, Director of the National Coordinating Committee for the Promotion of History, "we worked hard for the establishment of the temporary Bicentennial Office of the House of Representatives back in 1982, and we're delighted to see it now a permanent office." The Bicentennial Office was due to expire at the end of September 1989, but with the passage of this rule, the House, like the Senate, now has established an official permanent historical office.

In addition to establishing the historical office, the House adopted a new rule that will have a dramatic impact for researchers. House rule #36, "Preservation and Availability of Non-Current Records of the House," opens up many records that were previously closed. The rule provides for the transfer of "non-current" House records to the National Archives. Though the records will remain the permanent property of the House of Representatives, they are to be made available for public use.

The major change this rule makes is that most House records will now be open after 30 years, thus repealing the previous 50-year closure policy. According to Dr. Miller, "The Senate has operated under a 20-year rule with specified exceptions for almost a decade with no cases of the release of sensitive information. We had hoped the House would have followed suit. Though this didn't happen, the 30-year rule is an improvement over the 50-year policy."

The rule provides that records can remain closed longer than 30 years if the Clerk of the House determines that the availability of such records (such as the investigative records of the House Un-American Activities Committee) will remain closed the full 50 years.

If you would like a copy of the newly adopted House rules discussed above, drop me a note at National Parks and Conservation Association, 1015 31st Street, NW, Washington, DC 20007, and I'll be glad to forward a copy on to you.

New on the Market

The Rio Abajo Frontier, 1540-1692 by Dr. Joseph P. Sanchez; $14.95. The first publication of the Spanish Colonial Research Center, "Frontier" is a history of early colonial New Mexico in which a neglected historical period is examined. Manuscript sources are chiefly from Spanish and Mexican archives. Order from the Albuquerque Museum, 2000 Mountain Road, NW, Albuquerque, NM 87104.

New Life for Old Houses, by George Stephen; 240 pp; $12.95 pb (less 10% for library and National Trust members); March 1989. First published in 1972 as **Remodeling Old Houses without Destroying Their Character,** this new, updated edition begins by explaining general design terms and principles, how to select and finance a house, and ways to retain an architect and contractors. It also offers advice on choosing brick, clapboard, shingles or other siding in appropriate colors, with attention to existing features such as windows, shutters and doorways. Stephen is North Atlantic Regional Architect for the National Park Service and a practicing architect in Newtonville, MA. He describes how to measure, read and draw floor plans as well as how to prepare general layouts and specific rooms. To order, write The Preservation Press, 1785 Massachusetts Avenue, NW, Washington, DC 20036. Sales tax applicable in CA, CO, DC, IL, IA, LA, MD, MA, NY, PA, SC, TX and VA. For prepaid orders include $2.50 for first book, $.75 for each additional book.

NPS Publications

The following publications, available from GPO, give historic preservation guidance to a broad audience, including homeowners, developers, architects, and preservationists in general.

- **Preservation Briefs 18: Rehabilitating Interiors in Historic Buildings—Identifying and Preserving Character-Defining Elements.** H. Ward Jandl. Helps building owners identify and evaluate components of interior spaces prior to rehabilitation. GPO stock number: 024-005-01041-6. $1.00 per copy.
- **Preservation Briefs 17: Architectural Character—Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character.** Lee H. Nelson, FAIA. Explains a fundamental approach to establishing the character of a building by looking at its materials, features, and spaces—those elements that need to be considered prior to rehabilitating a historic building. GPO stock number: 024-005-01039-4. $1.00 per copy.
- **Preservation Briefs 16: The Use of Substitute Materials on Historic Building Exteriors.** Sharon C. Park, AIA. Provides guidance on the use of non-historic materials in rehabilitation projects, including a discussion of when to use them, cautions regarding performance, and descriptions of several substitute materials together with advantages and disadvantages. GPO stock number: 024-005-01037-8. $1.00 per copy.
- **Preservation Briefs 15: Preservation of Historic Concrete: Problems and General Approaches.** William B. Coney, AIA. Useful for anyone undertaking repair or limited replacement of reinforced concrete (cast-in-place or reinforced). GPO stock number: 024-005-01027-1. $1.00 per copy.
- **Interpreting the Secretary of the Interior's Standards for Rehabilitation.** Compiled by Michael J. Auer. Discusses 33 actual rehabilitation projects reviewed by the National Park Service in its administration of the historic preservation tax incentives program.

All of these publications may be ordered by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20240-9325. Make check payable to the Superintendent of Documents. Prices include postage and handling.

Announcements

Call For Papers

A national symposium in celebration of the centennial of The American Institute of Architects' formal commitment to historic preservation—1890 to 1990—will be held in Washington, DC on February 2 and 3, 1990.

The theme of the symposium is "The Role of the Architect in Historic Preservation: Past, Present, and Future." Abstracts for papers must be submitted to the AIA by May 8, 1989. They should be typewritten and 300 to 500 words in length.

For more information contact Bruce M. Kriviskey, AIA/AICP, Director; Historic Preservation Programs; The American Institute of Architects; 1735 New York Avenue, NW; Washington, DC 20006; 1-202/626-7452.

Workshop for Preservation Professionals

A workshop on "Preserving and Interpreting the Industrial Landscape" will be held June 23-30, 1989 in Chicago. Sponsored by the National Council on Public History, in cooperation with the Society for Industrial Archeology, the workshop is designed to help the preservation professional deal with the challenges of factories, processing plants, mines, transportation systems, and the communities related to them.

For registration or information, contact Theodore J. Karamanski, History Department, Loyola University, Chicago, IL 60626; 1-312/508-2221.

Historic Preservation Conference

Pennsylvania's 11th Annual Conference on Historic Preservation will be held in Pittsburgh April 27-29, and will focus on the state's industrial heritage. Cosponsored by the Preservation Fund of Pennsylvania and the Bureau for Historic Preservation of the Pennsylvania Historical and Museum Commission, the yearly meeting will feature sessions, tours, and special events highlighting the importance of the state's industrial past.

For registration information, contact The Preservation Fund of Pennsylvania, 2470 Kissel Hill Road, Lancaster, PA 17601; 1-717/569-2243.

Training Courses

• **Archeology for Managers,** sponsored by the National Park Service, will be held June 26–30, 1989, at the Stephen T. Mather Training Center in Harpers Ferry, WV. This training will familiarize land managers and program managers with archeology and archeological resources so they can identify programs early and choose effectively among alternatives for solutions. Employees in governmental agencies as well as the private sector may apply. Applications must be received by May 10, 1989.

For more information, contact Connie Backlund, Mather Employee Development Center, P.O. Box 77, Harpers Ferry, WV 25425; Phone: 1-304/535-6371 or FTS 925-6215.

• **Archeological Protection Training for Cultural Resources and Law Enforcement Managers and Specialists** is being offered 13 times Nationwide by the Archeological Assistance Division of the National Park Service. Through an overview of archeological resource crime in the United States, participants in the 12-hour course will gain an understanding of how the protection problem developed and its current magnitude.

The course is open to Federal, state, and local agency personnel as well as other professionals who are concerned with improving the protection of archeological resources.

Dates, location and contacts for the next three courses follow: April 4-5 in Atlanta, GA; John Ehrenhard, NPS Southeast Regional Office; 404/331-2629; May 2-3 in Washington, DC and May 4-5 in Concord, NH; Deborah Burnett, NPS Mid-Atlantic Regional Office; 215/597-9153. Additional information about this course is available from Richard Waldbauer, 202/343-4113.

Viga Restoration, A Reversable Technique

The Southwest Region's preservation team (within the Southwest Cultural Resources Center) is making replacement viga ends in a manner that is structurally determinable, technically facile, and most important—reversable. This process has been applied to Pueblo Revival Style buildings in the Carlsbad Caverns Historic District, at White Sands National Monument, and Bandelier National Monument. It is proposed for the Old Santa Fe Trail Building (regional office) in Santa Fe.

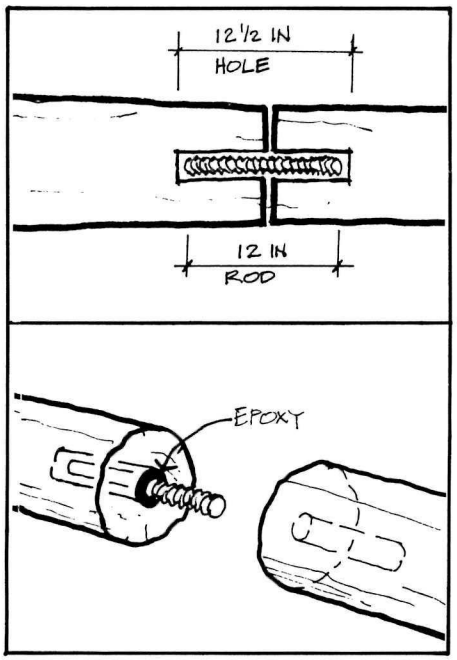
The process involves several stages and the techniques vary with the type of structure (adobe or stone usually) and the architectural detail (parapet, buried in the masonry, or portal). When the extent of the rot indicates the necessity to replace the viga end, the original is cut off and the rot is drilled or carved out. The location of the viga cutoff is determined by the location of the rot, the eventual finish applied, the visibility of the new viga connection, and the surrounding materials and conditions. Special jigs may be needed to make the cut if an exposed joint is required. Once cut, the rot is removed and a hole is drilled into the center of the viga to a depth determined by the original and left oversize in diameter. Then a center hole is drilled into this stub, matching the hole drilled into the viga. Plywood templates are fabricated with holes in their centers and outside diameters matching the viga stubs.

One inch diameter Fibrebolt (threaded fiber glass rod) is cut to a predetermined length and fastened to the plywood templates with fiber glass nuts. Epoxy is then formulated and pumped into the holes and spaces prepared in the stubs and vigas. The templates are then attached to the ends with the Fibrebolts inserted into the matching holes. The Fibrebolt in the stub end is pretreated with a mold releasing agent, as are the plywood faces. When the epoxy has set, this bolt is removed, leaving a threaded core inside the stub. The fiber glass nuts are left in the ends of the vigas and the stubs. The stubs are then threaded tightly onto the rodded vigas and shaped down to final size and texture. From this time on, future viga replacements may be added at any time in the same manner. If more than one viga end needs to be replaced, it is best to set up an "assembly line" to cast the Fibrebolt in the new viga ends.

—Jake Barrow SW Cultural Resources Center

Editor's Note: Vigas are the log roof rafters used in prehistoric and historic "Pueblo" structures. The ends of the vigas project through the exterior bearing wall and are exposed a foot or more to the weather. Like rafter tips and crowns of rustic log construction, they are important to the architectural character of the building. Similar repairs with epoxy have been used for rustic log repair, so feedback about other methods and problems will be appreciated.

Hugh C. Miller



STEWARDSHIP OF AMERICA'S PUBLIC LANDS AND NATURAL RESOURCES

President George Bush and Interior Secretary Manuel Lujan, Jr. agreed to the following 10-point agenda. The first letters of the agenda items form the acronym that is the overarching theme of this Administration's program—STEWARDSHIP.

STEWARDSHIP: We will be good stewards, conserving and wisely managing our national resources of limitless beauty and value.

TERRITORIES: We will work with the leadership of the Territories and Freely Associated States to further the political, economic, and social development of their peoples.

EDUCATION: We will place a high priority on the important role of education in ensuring the public's knowledge, appreciation, and support of our natural resource policies. We will use Departmental resources to help develop the Administration's long-range plan to reform, rejuvenate, and revitalize our education system for the benefit of all Americans.

WAR ON DRUGS: We will be aggressive soldiers in the Nation's war on drugs. We will take all appropriate measures to: (1) increase cooperative efforts with State and local law enforcement officials to eradicate illegal crops and to interdict the sale and transportation of drugs on public lands; (2) provide a drug-free workplace; and (3) encourage treatment for drug users.

AMERICA THE BEAUTIFUL: We will implement President Bush's "America the Beautiful" concept to strengthen and preserve our National Parks, National Wildlife Refuges, and Wilderness Areas.

RESPONSIBLE, EFFICIENT, AND ETHICAL MANAGEMENT: We will manage the Department in a fiscally responsible, efficient, and ethical manner, with a high priority placed on equal opportunity.

DOMESTIC RESOURCES: We will manage the multiple-use Federal lands and waters to provide the widest range of benefits from these domestic resources to the American people, including preservation, recreation, energy, minerals, water supply, food, and fiber.

SCIENCE AND TECHNOLOGY: We will aggressively apply the Department's unique scientific and technological resources to the solution of national and international problems such as water and air quality, global climate change, acid rain, and biodiversity.

HARMONY: We will strive to bring a spirit of harmony to our public policy discussions through consultation, cooperation, and coordination instead of confrontation among competing interests, consistent with President Bush's call for a "kinder, gentler Nation."

INDIAN TRIBES AND ALASKA NATIVE GROUPS: We are committed to making the ideals of Native American self-government and self-determination a reality. We will work with Native Americans to promote economic development, improved educational opportunities, and other measures to enhance their quality of life.

PARTNERSHIPS: We will promote partnerships with State and local governments, individuals, and public and private groups at all levels, as well as utilize President Bush's "thousand points of light"—the varied, voluntary, and unique organizations within our Nation of communities.

Secretary Luhan uses considered wording in his agenda items, Domestic Resources and Partnership. This language is particularly important to the readers of the Bulletin and should be noted. —Ed.

THE SECRETARY OF THE INTERIOR
WASHINGTON

Dear Interior Employee:

As we embark on our service in the Administration of President George Bush, I would like to take this opportunity to share some thoughts with you about the challenge we face in the years ahead.

First, it is a great honor to serve this President as Secretary of the Interior and a pleasure to work with the Department's public servants. As a member of Congress and of the House Interior Committee, I gained firsthand knowledge of your dedication and professionalism. The experience of the transition has strengthened my sense of respect for Interior employees.

I am a Westerner, a native of New Mexico, where I grew up under the influence of three cultures—Spanish, Indian, and Anglo. This upbringing instilled in me a deep reverence for the beauty and sanctity of our land. Over the past two decades in Congress, I have kept faith with my upbringing and worked for the preservation of the land and waters and natural riches that are the great gift of our American heritage.

I assume my responsibilities as Secretary knowing that the commitment we share is essential to the success of our vital mission. America is blessed with a rich abundance of natural and cultural resources. It is our responsibility, our duty, to use these treasures prudently and pass them unspoiled to our children and grandchildren. Clearly, the Department of the Interior is charged with several of the most important tasks facing the nation—the management of our public lands and resources and administration of human resource programs for Native Americans and the Territories.

President Bush has made stewardship a top priority of his Administration. The President and I are dedicated to the preservation, conservation, and development of America's natural resources in an environmentally sound manner. The President and I have agreed that the idea of stewardship will guide us in this endeavor. And we have set out a 10-point agenda (outlined on the following pages) to achieve our goals.

I look forward to meeting our challenges. Together, we will provide leadership at the Interior Department to help achieve George Bush's vision of a strong, prosperous, and healthy America.

Sincerely,

Manuel Lujan Jr.

MANUEL LUJAN, JR.

CRM BULLETIN

Volume 12: No.1

Published by the National Park Service for parks, Federal agencies, states, local governments, and the private sector to promote and maintain high standards for preserving and managing cultural resources.

Associate Director: Jerry L. Rogers
Managing Editor: Ronald M. Greenberg
Associate Editor: Michael G. Schene
Production Manager: Karlota M. Koester

Cultural Resources, Washington, D.C.

U.S. Department of
the Interior
National Park Service
Cultural Resources
P.O. Box 37127
Washington, D.C. 20013-7127

Third Class Mail
Postage & Fees Paid

U.S. Department of the Interior
G-83