

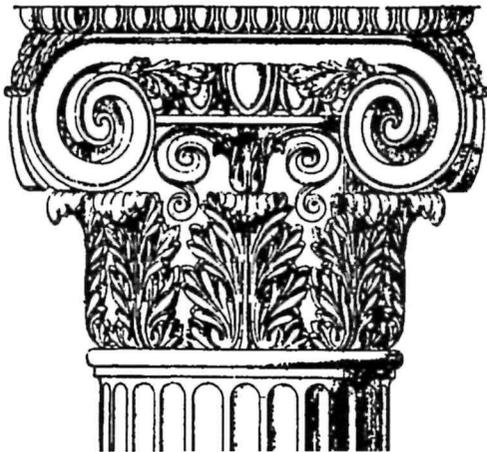
NCPTT

NATIONAL CENTER FOR PRESERVATION TECHNOLOGY AND TRAINING



NOTES FROM THE CENTER

MARCH APRIL 1996



FROM THE EDITOR

This edition of *Notes from the Center* highlights a few of the many research projects and training activities undertaken by the Center outside of its grant program. These projects are an integral part of the overall program and focus on a variety of research and technical developments.

Featured in this edition of *Notes* is the third in a regular series of columns on the Internet which discusses the many applications of the Internet for interpersonal communication.

The Center's gopher recently has been updated with preservation laws and regulations. And the Center now has a presence on the World Wide Web.

Elliot Spiker's research at the USGS conducted on behalf of the Materials Research Program also is highlighted. This work uses laboratory experiments to develop theories that help explain sulfur deposition on stone

buildings.

Featured in this issue is a report on a recent study by Jim Ebert, of Ebert and Associates, on the feasibility of developing techniques for converting existing cultural resource archives in State Historic Preservation Offices to geographic information systems.

The Center also welcomes a number of new interns and research fellows as well as a new PTTBoard member, Christy Johnson McAvoy.

Comments and items of interest for the next newsletter should be sent to the editor of the upcoming *Notes*, Fran Gale.



THE CENTER

The National Historic Preservation Act Amendments of 1992 established the **National Center for Preservation Technology and Training** at Northwestern State University of Louisiana in Natchitoches.

The Center and its advisory board – the **Preservation Technology and Training Board** – were organized throughout 1993 and 1994, and the Center's charter staff arrived in Natchitoches by January 1995.

The Center is an interdisciplinary effort by the **National Park Service** to advance the practice of historic preservation in the fields of archeology, historic architecture, landscapes, materials conservation, and history. The Center's mission is implemented through its three components – research, training, and information management.

The Center's **research** component emphasizes innovative, practical solutions to current preservation and conservation questions.

The Center's **training** component emphasizes preservation skills enhancement, life-long learning at all levels of preservation practice, and continuing education for preservation professionals.

The Center's **information management** component emphasizes cultural resources data management and information distribution that is innovative and appropriate for the electronic age.



PTTBOARD

*Secretary of the Interior Bruce Babbitt recently appointed Christy Johnson McAvoy to NCPTT's advisory board – the **Preservation Technology and Training Board**. The PTTBoard is pleased to be joined by Ms McAvoy, who brings to the Board broad expertise in private-sector preservation advocacy and planning. The following brief biography is an introduction to our newest PTTBoard member, who will join the Board at its Spring 1996 meeting.*

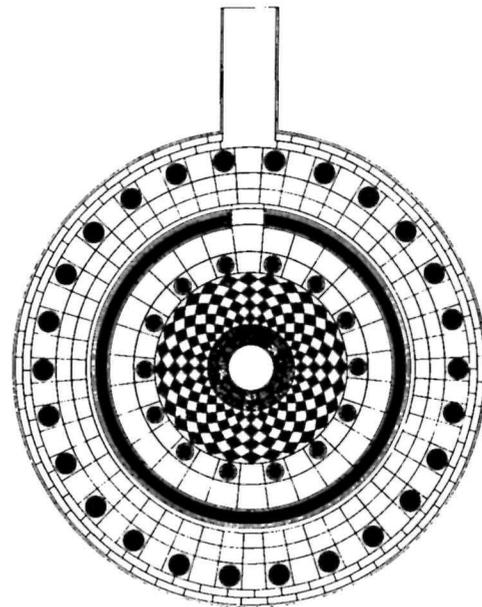
– *Elizabeth Lyon, PTTBoard Chair*

Christy Johnson McAvoy is founding principal of Historic Resources Group, an historic preservation planning and development firm based in Hollywood, California. In addition to serving on the PTTBoard, Ms McAvoy serves on the Board of Advisors of the National Trust for Historic Preservation, and as a board member of Hollywood Heritage. Ms McAvoy is former president of the California Preservation Foundation. In 1993, Ms McAvoy received the Los Angeles Conservancy's President's Award.

Ms McAvoy's undergraduate training is in American social and cultural history; her graduate work is in architectural history and the humanities. For over fifteen years, Ms McAvoy has practiced as a cultural resource planner, and her work has included the evaluation, designation, rehabilitation and development of historic properties and districts. Her planning work includes historic resource surveys for the cities of Los Angeles, Beverly Hills, Pasadena and Santa Monica; historic district nominations; and preservation planning components for large master plan projects.

As a consultant to developers, architects, government and non-profit organizations, Ms McAvoy provides expert guidance in historic preservation regulations and processes at local, state and national levels. Ms McAvoy has long been involved in preservation education and training from elementary to graduate

levels, and has prepared and published technical assistance, interpretive and heritage education materials and curricula.



MATERIALS RESEARCH PROGRAM

This article in the Materials Research Program series highlights Elliott Spiker's research at the United States Geological Survey (USGS). This work focuses on the deposition of gaseous pollutants to the surface of representative building materials in laboratory studies using an environmental exposure chamber.

***Elliott Spiker** is a Research Geochemist with the USGS. In addition to deposition studies for the Center, Spiker's research also has focused on the application of stable isotope techniques to environmental problems. His current research projects include sulfur geochemistry of peat and coal; sulfur geochemistry of mercury cycling in the Everglades, Florida; sulfur geochemistry of climate change in Lake Baikal, Siberia; sulfur geochemistry of coal utilization and combustion; and sulfur isotope geochemistry of acid mine drainage.*

Currently, the cultural resources aspect of the National Park Service's **Materials Research Program** emphasizes research on the effects of acid rain and air pollution on calcareous stone. Limestone and marble contain calcite and are used in the construction of buildings, monuments and carved stone ornament. These materials suffer damage from exposure to air pollution, and acid rain in particular.



Pollution can be deposited onto calcareous stone in two ways – dry or wet deposition. Wet deposition was discussed in the June issue of *Notes*, and dry deposition was presented in the July/August issue of *Notes*. Pollution can be in the form of particles, such as sulfate, nitrate, and carbon, or in the form of gases, such as sulfur dioxide and nitric acid. The ways in which pollutants are delivered to surfaces and the resistance of surfaces to pollutant deposition are important in predicting where damage is likely to occur on historic buildings and monuments. Delivery or transport of pollutants to stone surfaces can be affected by atmospheric and surface conditions. Atmospheric factors may include wind speed and direction, relative humidity, air and surface temperatures and precipitation. Surface conditions include surface porosity and roughness.

The goal of Spiker's research is to investigate in the laboratory the deposition of gaseous pollutants to the surface of representative calcareous building materials. Spiker uses a specially designed environmental exposure chamber that is aerodynamically well characterized in order to isolate the major variables that affect the deposition of sulfur dioxide onto stone surfaces. Spiker looks at how relative humidity, air flow, and pollutant concentrations affect the uptake of sulfur dioxide on stone samples. He also studies how the chemistry, roughness and porosity of the stone affect the results. Using existing theories of mass transfer, these data help us to estimate the pollutant uptake by stone surfaces under real-world conditions. This in turn leads to a better understanding of the dry deposition process and factors that cause damage to the stone.

To date, Spiker's studies have shown that sulfur dioxide deposition increases exponentially with increasing relative humidity for samples of fresh Salem limestone and Shelburne marble. The rate of deposition is much higher for limestone than it is for marble. This is likely due to differences in porosity and amounts of moisture that can be absorbed on the surface of stones. In real-world situations, water absorption and surface wetness are affected by stone type, porosity, surface finish and roughness, and contaminants as well as

differences in surface temperatures between night and day. Spiker's work suggests that the rate of sulfur dioxide deposition is controlled by the wetted surface area of the stone.

Sulfur dioxide deposition can be described by a complex mathematical equation that includes aerodynamic and surface functions. Spiker's work allows us to separate these functions. He has shown that while relative humidity affects the ability of the surface to absorb sulfur dioxide (a surface function), wind speed and turbulence affect the amount of sulfur dioxide that is delivered to the surface (an aerodynamic function).

Spiker currently is looking at the effect of tooling of the stone's surface on the uptake of pollutants. His initial results show a significant increase in sulfur dioxide deposition because of the increased surface area of tooled stone. However, the increased roughness of the tooled stone may have a significant influence on the aerodynamic factors limiting deposition so that results should be interpreted with caution.

By better understanding the relationship between these variables and the deposition of sulfur dioxide on laboratory samples, we can begin to model deposition rates on real buildings and predict potential damage in the future.

For more information regarding this work, contact—

*Elliott Spiker
U.S. Geological Survey
12201 Sunrise Valley Drive, MS 956
Reston, VA 22092*

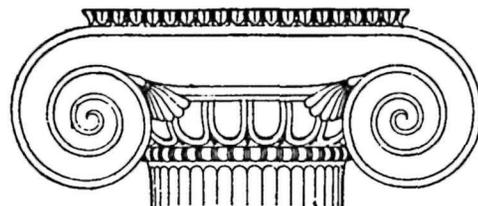
—Mary F. Striegel

Chamber on the Move

As part of the development of on-site research at the Center, Elliott Spiker's dry deposition project and environmental exposure chamber are being transferred from the USGS in Reston, Virginia, to the Center's home at Northwestern State University in Natchitoches. The Center staff plan to have the exposure chamber in place by mid-Summer 1996.

The addition of the environmental exposure chamber to the Center will greatly enhance our research capabilities. To

facilitate this transfer, and to promote further research in this area, the Center has selected ElizaBeth Bede as the 1996 NCPTT Research Fellow (for more information on Bede, see **Work in Progress** in these *Notes*). Bede will work closely with the Center's staff to design experiments that look at the effects of conservation treatments on sulfur dioxide deposition rates. She will also oversee the transfer of the chamber to Natchitoches. We look forward to working with ElizaBeth.



THE INTERNET

This is the third in a regular series of columns on the Internet. This article discusses ways to find and distribute information on the Internet. If you have suggestions for Internet-related topics that you would like to see discussed in this column or if you have a question about matters addressed here, please contact the Center via e-mail or regular mail.

The Internet serves two primary uses – 1) finding and disseminating information and 2) interpersonal communication. The first use involves using facilities like gophers, World Wide Web sites, telnet, and ftp and was discussed in the last edition of *Notes*. The second use fosters communication on the Net through electronic mail via bulletin boards, newsgroups, listservs, and individual mailings, and is the topic of this column.

Electronic mail: Each person with access to the Internet usually has the capability of receiving electronic mail (e-mail). As described in the last edition of *Notes*, each gopher, World Wide Web, ftp, or telnet site on the Internet is reached via an address (URL). Similarly, each person accessing the Internet has an address where he or she can receive messages from others on the Internet.

This address most often takes the form of a username followed by the "at" character (@) followed by a domain name, i.e.,



mcarroll@alpha.nsula.edu. The username indicates the person for whom the mail is intended. The domain name refers to the physical location of the computer through which the user accesses the Internet. For example, in the address, mcarroll@alpha.nsula.edu, mcarroll is the user and alpha.nsula.edu is the domain. Mail sent to mcarroll@alpha.nsula.edu will be saved to the space allocated to Mary Carroll (mcarroll) on the computer named alpha at Northwestern State University of Louisiana (alpha.nsula.edu).

There are many software applications that can be used to read, send, forward, save, delete, and otherwise organize e-mail. The transmission of electronic messages is independent of these programs. That is, it is not necessary for the sender and the receiver to use the same application. They will still be able to communicate.

Individual mailings: At its simplest, e-mail is used for communication between individuals. In that case, the sender will compose the message, attach the receiver's address, and send it using the e-mail program. The receiver will be notified by his or her e-mail program that mail has been received and the receiver can then read, reply to, forward, save, or delete that message.

Bulletin boards/newsgroups: Bulletin board systems (BBS), commonly referred to as bulletin boards, use e-mail to facilitate discussion between large numbers of people. This system is based on the concept of real bulletin boards where people pin messages at one centralized place for others to visit and read. In a computerized bulletin board, there is a central site (computer) with an e-mail address where messages are sent. Anyone can "visit" the bulletin board and read any posted message.

Most bulletin boards are created to discuss a particular topic. The best example of this is Usenet newsgroups on the Internet. Simply access Usenet (the process will vary by the service provider), pick a topic (there are thousands), and you see a list of posted messages. You can then view them, respond to them, or post a new message. Bulletin boards also exist outside the Internet. In place of an e-mail address, a phone number is associated with the system. Users access the bulletin board via modem and then

view, respond, and post messages.

Listservs: A listserv is an electronic discussion forum that takes the form of an e-mail mailing list. The term *listserv* comes from the software that is used to create and administer most of these lists. Unlike bulletin boards where messages are sent and saved to a central site, listserv messages are sent by individuals to a central site but then redistributed by the software to the e-mail addresses on a list. Participants must subscribe to the list by sending a standardized message to a specified address. Any messages sent to the address for the listserv are then sent to every address on the list. None is stored at the listserv site. Subscribers receive listserv communications in their e-mail and can respond or post new messages via e-mail.

Like bulletin boards, listservs usually are created for the discussion of particular topics and are named to reflect that subject. For example, MUSEUM-L is a listserv devoted to discussion of museum-related issues; ARCH-L is devoted to issues in archeology. There are hundreds, if not thousands, of listservs available on the Internet. The Center maintains a guide titled ***Internet Resources for Heritage Conservation, Historic Preservation and Archeology*** which includes a section on listservs. It is available via the Center's gopher (gopher://gopher.ncptt.nps.gov) or World Wide Web (<http://www.cr.nps.gov/ncptt>) sites. Other resource guides are available at the **Clearinghouse of Subject Oriented Internet Resource Guides**, which also is accessible via the Center's gopher.

Additional reading: If you'd like to read about the Internet in more detail there are many excellent source books available. Two that were used for this column are *The Whole Internet User's Guide & Catalog*, Second Edition, by Ed Krol, O'Reilly & Associates, Inc., and *The Internet Unleashed*, foreword by Kevin Kelly, Sams Publishing.

—Mary S. Carroll



SHPOS AND GIS

Cultural resource databases accumulated at State Historic Preservation Offices across the United States contain millions of site and project records that are accessed an estimated 50,000 to 60,000 times a year by private sector and government archeologists, historians, architects and other cultural resource management professionals. Most of these database users report that difficulty of access and of finding the information they need—and especially data incompatibilities across state lines—“substantially hampers their work.”

These and a wide range of other conclusions were among the results of a year-long study conducted in 1994 and 1995 by Ebert & Associates. The study was partially funded by a Small Business Innovation Research grant (Award III-9360278) from the National Science Foundation. SHPOffices and their archive managers, private sector archeologists and firms, and government regulatory personnel with CRM responsibilities were polled and interviewed to determine the need for, and feasibility of, developing generally applicable methods and techniques for converting existing SHPOffice databases to geographic information systems (GIS) format.

Most SHPOffice archives contain some data in digital formats, although in all archives the vast majority of data is in the form of paper site forms, maps, and project reports. Most states maintain site and project locations on USGS 7.5-minute topo quad sheets – more than 80,000 of them across the United States. Interestingly, in all but eight states there are some parallel CRM archives, most of which are maintained by state or federal agencies other than SHPOffices.

While GIS database management technology provides the best available means of organizing spatially structured data such as those in SHPOffices' archives, and while almost all of the states surveyed aspire to compile GIS databases, only a few SHPOffices have operational GIS capabilities. This is not surprising for a number of reasons.



GRANTS

1994 PTTGrants in Research

Final reports for a number of the research grants awarded in fiscal year 1994 will be available after May 1 of this year. Copies will be available upon request to Mark Gilberg.

The Center continues to encourage award recipients to present the results of their research at conferences and workshops, and to publish their findings in the professional literature. Since 1995, it has been the Center's policy to accept manuscripts submitted for publication in a professional journal or magazine – which incorporate the results of the research funded by the PTTGrants program – in lieu of a final report. In this way, results are disseminated to a much wider audience. This also ensures that work is properly reviewed.

Readers should note that preliminary findings for several PTTGrants projects will be presented at the forthcoming 61st Annual Meeting of the Society for American Archeology to be held in New Orleans, April 10-14, 1996. These include results of the following PTTGrants projects –

Residue Analysis: How you can do it and how much it will cost.

Noreen Tuross, Smithsonian Institution.

Trace biologies in the form of blood, food, hafting material can be found on archeological artifacts. This workshop will be techniques-oriented and aimed at archaeologists who want to do residue analysis on excavated objects. The range of techniques to be discussed include microscopy, immunology, high pressure liquid chromatography, mass spectrometry, and polymerase chain reaction used to amplify DNA. The limits of each approach and approximate costs will be discussed.

Agent-based modeling of prehistoric settlement behavior.

A. Kohler, Department of Anthropology, Washington State University.

This workshop presents a hands-on introduction to the emerging field of agent-based simulation. The first half will be presented by personnel from the Santa Fe Institute, a leader in the field of complex adaptive systems. Emphasis will be on the structure and use of the simulation system *Swarm*, developed at the Santa Fe Institute and now in beta testing. The second half will detail a simulation of settlement behavior in the Mesa Verde region being developed by Washington State University and the Santa Fe Institute.

Sherds, pesticides, and archeological sites (1995 PTTGrants)

Robert Thorne, University of Mississippi.

1995 PTTGrants in Training

The following three training programs are scheduled to take place in the near future—

Landscaping to Support Historic Sites

Vicksburg, Mississippi

March 14-15

The Southern Cultural Heritage Foundation of Vicksburg will conduct a seminar on **Landscaping to Support Historic Sites**. The seminar was developed with funds awarded in the 1995 PTTGrants Program. Speakers include **Edward C. Martin, Jr.**, FASLA, Professor Emeritus of Landscape Architecture at Mississippi State University; **Neil G. Odenwald**, Professor and former Director, School of Landscape Architecture at Louisiana State University; and **Susan Haltom**, former curator of exhibits at the Mississippi State Historical Museum. For additional information, contact Grace Aaron at the Southern Cultural Heritage Foundation, 601/631-2997.

Preservation Workshops

Natchitoches

March 16-April 3

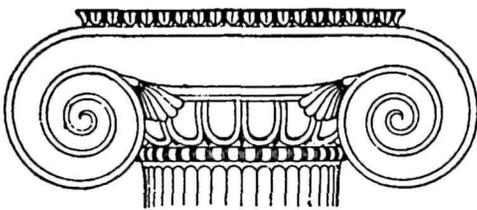
Six workshops will be offered in Natchitoches by the **Preservation Institute for the Building Crafts of Historic Windsor, Inc.**, Windsor Vermont. The Preservation Institute has provided continuing education for more

GIS is a relatively recent development, and given today's technology, hardware and software necessary for a very basic GIS database management system can cost \$50,000 to \$150,000. Far more daunting than hardware or software (and trained people to manage GIS systems), however, is the effort required to compile or convert data to digital form. Especially in larger western states, site and project locations will have to be converted from as many as 4500 map sheets — and converting information from site forms is an even more frightening prospect. Based on time-and-effort studies undertaken with actual SHPOffice data and maps in New Mexico and Wyoming, our research indicates that conversion of SHPOffices' archives to GIS format may cost \$100-200 million over the next five to ten years.

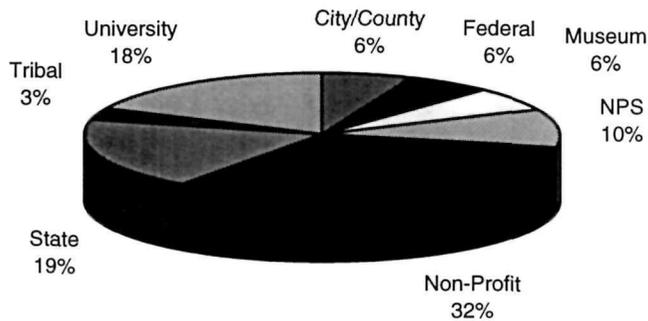
Whether there is really this sort of market for GIS conversion of SHPOffice databases, and whether a general database format is appropriate and desirable for managing cultural resource management data across the United States are more complex questions that were addressed in the course of our research. Copies of the final report on this research are available on request from NCPTT, in care of Mark Gilberg.

—Jim Ebert

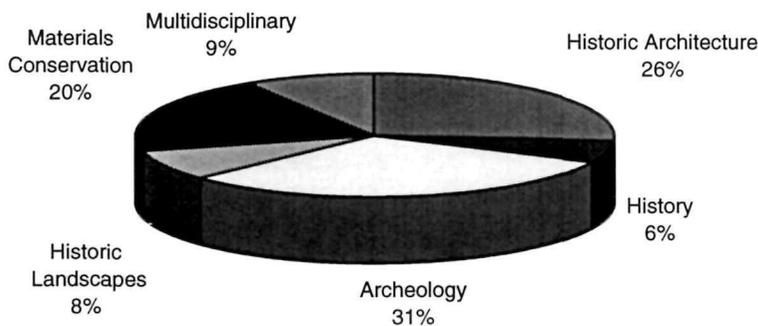
Jim Ebert is an archeologist and anthropologist with more than twenty years experience in photo-interpretation, photogrammetry, and mapping technologies. He currently is principal of Ebert & Associates, Inc., in Albuquerque, New Mexico. The firm specializes in applications of aerial and terrestrial photo-interpretation, remote sensing, image analysis, GIS systems, and CAD to archeology, forensic science and environmental research.



Number of Proposals by Organization



Number of Proposals by Discipline



Analysis of 1996 PTTGrants proposals

than 2,000 building professionals since 1983. The Natchitoches workshops include **Moldings: The Building Blocks of Classical Architecture; Preservation Philosophy for People Who Maintain Old Buildings; Care and Repair of Edge Tools; Historic Plaster Repair: Ornamental and Flat Wall; Structural Evaluation and Repair: Wooden Frame Structures; and Conservation and Replication of Decorative Finishes.**

For registration and scholarship information, contact Fran Gale, 318/357-6464; NCPPT's fax-on-demand service at 318/357-3214; or The Preservation Institute, POB 1777, Windsor, Vermont 05089, 802/674-6752.

Diagnosing Moisture in Historic Buildings

Washington, DC
May 6-8

This symposium on *Diagnosing Moisture in Historic Buildings* was funded through a 1995 PTTGrants award to the **Friends of Meridian Hill**. The symposium will be the model for future seminars offered in other parts of the country. Other symposium sponsors include the **National Park Service, Association for Preservation Technology** (Washington, DC Chapter), **Friends of Meridian Hill**, and **Friends of Great Falls Tavern**.

The symposium will focus on identifying sources of moisture in historic buildings

including ground moisture, moisture penetrating building envelopes, and moisture generated inside the building generally as a result of climate control systems. The use of technical instruments and monitoring devices in diagnosing complex problems will be demonstrated at Meridian Hill Park, Washington, DC; Great Falls Tavern on the C&O Canal in Maryland, and Gunston Hall, Colonial home of George Mason, in Virginia.

For more information, contact Steven Coleman, President of Friends of Meridian Hill, 202/387-9128; or Brooks Prueher with the National Park Service, 202/343-1185.

1996 PTTGrants

A total of 162 PTTGrants proposals were received for this year's program. Proposals were distributed among three PTTGrant categories: 52 proposals in research, 69 in training, and 44 in information management.

This is the first year for information management proposals as a separate PTTGrants category. The quality and number of information management proposals received this year, and last, fully justifies expanding the PTTGrants program.

Requests for 1996 PTTGrants in research, training, and information management total nearly \$5 million.

An analysis of proposals by discipline and by submitting organizations is presented in the adjacent figures. Proposals were received from a range of non-profit organizations and government agencies across the United States. Collectively, universities, private non-profit organizations, and state agencies submitted the greatest number of proposals.

The selection process continues to be extremely competitive. As in previous years, each proposal will undergo 1) in-house screening to verify that proposals are on-time and complete, and that applicants are eligible to receive grants, 2) outside peer review by discipline, and 3) final panel review.

All qualified proposals are presently





APT96

BUILDING IDEAS

IDÉES À BÂTIR

*The Association for Preservation
Technology International*

Annual Conference
Hotel Fort Garry
Winnipeg, Manitoba

26-29 September 1996
Training Courses:
29 September - 1 October

*L'Association pour la préservation
et ses techniques, internationale*

Congrès annuel
L'hotel Fort Garry
Winnipeg (Manitoba) Canada

26-29 septembre 1996
Cours de formation:
29 septembre - 1 octobre

Programme Chair, APT
Box 27054, 360 Main Street
Winnipeg, Manitoba
Canada R3C 4T3

Tel. 204 983 4718
fax 204 983 5365
susan_algie@pchl.gc.ca

CONFERENCE ANNOUNCEMENT APT 96: Building Ideas/Idées à Bâtir

Winnipeg, Manitoba
26 September - 1 October 1996

AN INVITATION FOR BUILDING IDEAS

Many members of APT will not yet have had the pleasure of visiting the true prairie with its unique landscape, its diversity of cultures and an excellent collection of buildings that reflect that diversity. We invite you to join us for the 1996 annual conference in Winnipeg, Manitoba. Winnipeg has one of the best remaining historic warehouse districts in North America and yet is only two hours from some of the best "tall grass prairie" in the world. Located at the centre of North America, Winnipeg can easily be reached by air, rail or automobile. Presentations will include individual and team slide talks, round tables, and other formats. In addition to presentations, delegates will be invited to participate in tours, technical field sessions, affinity lunches, receptions and the APT General Meeting and Strategic Planning Session, all of which are included in the fee.

Conference sessions will be held Thursday afternoon 26 September - Sunday 29 September, with training courses on 29 September-1 October. Session topics will include: **Sticks and Stones** (materials, assemblies and the appropriateness of new and existing practices and techniques).; **Mending the Modern** (This session will continue the dialogue on modern building materials begun at the *Preserving the Recent Past Conference*, (Chicago 1995)); **Districts and Settlements** (the conservation of complexes and cultural landscapes). **Digital Heritage** (research, recording, analysis and training with computers).; **Sacred Spaces** (buildings and spaces of special significance); **On the Threshold** (buildings on the threshold of design, extinction or new approaches to conservation).

REGISTRATION

Registration packages will be sent to all APT members in July, but members wishing to take advantage of the "Deep Discount" registration rate can request a deep discount registration form and register before 15 April. Other interested parties will receive registration materials upon request. If you are not an APT member and would like to receive a registration package, please use the form provided on the reverse. Contact the APT Conference Address if you require further information.

Registration Fees: Canadian/U.S.Funds

Conference: All conference fees include special events, field sessions, tours and the annual lunch.

Deep Discount (until 15 April for members only) \$300CAN/\$220US

Member \$395CAN/\$290US (until 15 August) / \$445CAN/\$330US (after 15 August)

Non-member \$445CAN/\$330US (until 15 August) / \$490CAN/\$360US (after 15 August); includes Associate membership in APT

Student \$100CAN/\$75US

Training Workshops: Masonry or Log Conservation
\$600CAN/ \$445US (Registration closes 15 August)

*Co-sponsored by Canadian Heritage, Province of Manitoba, and
National Center for Preservation Technology and Training*

APT TRAINING WORKSHOPS

In keeping with its longstanding tradition, APT will be offering two three-day training workshops in conjunction with the 1996 Conference - **MASONRY CONSERVATION: Terra cotta and cast stone**, and **CONSERVATION OF LOG STRUCTURES** - to take place Sunday 29 September - Tuesday 1 October, 1996. Participants of each workshop will receive a comprehensive workbook containing useful reference material and sources for further information, and AIA accreditation will be available. In order to ensure that every participant benefits as much as possible from these training workshops, the number of participants will be limited and registration will be on a first-come, first-served basis. The cut-off date for registration is 15 August, 1996.

To obtain further information and/or a registration form, mail or fax the form below.

MASONRY CONSERVATION: Terra cotta and cast stone

Masonry conservation is becoming increasingly challenging as more 20th-century structures are subjected to conservation in an economic climate which demands better quality work at reasonable cost. The multitude of new products and techniques for the treatment, cleaning, repair and replacement means that a proper understanding of the materials, methods and issues involved is critical to meeting this objective.

While the emphasis of the course is on terra cotta and cast stone, other masonry materials - such as stone, brick, mortars, renders and early concrete - will also be covered. Through a mix of classroom sessions, demonstrations and site visits, the workshop will cover material properties and manufacture, deterioration issues and remedial options. The demonstration sessions will address casting for replacement and "Dutchman" repairs, as well as the use of traditional and proprietary cleaning, patching and repair systems.

The workshop will be held in Winnipeg's "Exchange District," which is rich in examples of conservation issues related to all masonry materials. Coordinated by Keith Blades, President of the Guild Institute of Stone and Restoration Masonry and longtime co-ordinator of APT's masonry conservation courses, the workshop team includes a mix of craftspeople and professionals with broad knowledge and experience of remedial procedures. It is directed at those who are involved in masonry conservation and who wish to enhance their practical and professional skills. Coffee breaks and two receptions will be included in the registration fee.

CONSERVATION OF LOG STRUCTURES

Historic log structures constitute some of the most significant heritage resources in Canada, the United States and throughout the world. History has shown that they are also among the most vulnerable to deterioration and to treatment by inappropriate conservation materials and methods.

This workshop will focus on understanding the cultural value, assessment and investigation of traditional log construction assemblies, as well as the properties of wood. Conservation treatments and their appropriate application to ensure protection of material, craft and design values will be discussed. The emphasis of the workshop will be on the craft-based remedial treatments such as log and crown-end repair, log replacement, chinking, and site work methods. Wood preservatives, water repellents, coatings, epoxies, consolidants and their appropriate use will also be included. The course will be presented through classroom sessions, field exercises and demonstrations.

The workshop will be held in Riding Mountain National Park, in western Manitoba, which is rich in examples of wooden structures representing a variety of different types of log construction and a multitude of conservation challenges. The course will be presented by a multi-disciplinary group comprising conservation architects, contractors, craftspeople and other specialists. The workshop is aimed at those who are involved in the assessment and conservation of historic log structures on a practical and/or professional level, including architects, engineers, technicians and craftspeople. The registration fee will include: transportation between Winnipeg and the site, some meals and three nights accommodation in the park.

- Please send information on APT membership.
- Please send information and registration for APT 96 Conference and Training Courses.
- Please send special registration form for member's "Deep Discount."

Name

Title

Company / Government Agency

Address

City

State/Province

Country

Zip/Postal Code

Telephone Number ()

Fax Number ()

Please mail or fax this form to APT 96; address and fax number on reverse

undergoing outside peer review. The final panel review is scheduled for the end of March in Natchitoches. The panel includes three NCPTT representatives - Mark Gilberg (Research Coordinator), Fran Gale (Training Coordinator), Mary Carroll (Information Management Specialist); and three representatives from State Historic Preservation Offices across the United States - **Brenda Barrett** (Deputy SHPO, Pennsylvania), **Gerri Hobdy** (SHPO, Louisiana), **David Hansen** (Deputy SHPO, Washington). **Alferdteen Harrison**, Director of the Margaret Walker Alexander Research Center at Jackson State University, Jackson, Mississippi, and PTT Board member, will serve as an observer, along with John Robbins, NCPTT Executive Director. Pending availability of funds, we anticipate that the Center's 1996 PTT Grants awards will be announced in late Spring.

WORK IN PROGRESS

Research Projects

While the PTT Grants program may be the Center's most visible activity, it is in fact only one of the Center's many active programs. The Center supports a range of preservation research and training activities outside the PTT Grants program. These projects are central to achieving the Center's mission and frequently involve the application of new technologies to preservation problems. Like the PTT Grants program projects, these projects are undertaken in cooperation with both public and private organizations. This column highlights a few of these current projects -

Research Priorities in Art and Architectural Conservation

American Institute for Conservation of Historic and Artistic Works (AIC), Washington, DC

The Center is working with the AIC to help them identify specific research needs in the field of materials conservation. Building on an earlier AIC membership survey report, *Research Priorities in Art and Architectural Conservation*, the top ten research priorities

will be established for each of the specialty working groups - Book and Paper, Objects, Paintings, Photographic Materials, Textiles, Wooden Artifacts, and Architecture.

Laser Divestment Processes in Conservation

Los Angeles County Museum of Art - Conservation Center

The Center is initiating a project with the Conservation Center of the Los Angeles County Museum of Art to review the current technical status of laser divestment as a tool for preserving cultural materials. This review will outline areas in which controlled experimentation can be done to advance the state of the art and to provide concrete information on the merits of laser divestment in comparison with other processes.

Independence Hall Exhibit

National Park Service - Harpers Ferry Center - Division of Conservation

Harpers Ferry Center, the National Park Service's central interpretive design facility, is currently producing a new exhibit for Independence Hall in Philadelphia, which will include a Dunlap print of the Declaration of Independence and original copies of the Constitution and Articles of Confederation. The unique display environment and extreme value of the objects require the development of a specialized exhibit case. The Center is providing technical and financial assistance for the conservation design phase of this project to ensure that the most current exhibition technology is incorporated in all design features.

Museum Exhibit Lighting - Conservation, Lighting Design and Current Technology

The Washington (DC) Conservation Guild, National Park Service - Harpers Ferry Center - Division of Conservation, The Freer Gallery of Art and Arthur M. Sackler Gallery - Department of Conservation and Research

The Center is providing partial financial

support for this three day seminar and workshop on museum exhibit lighting to be held at National Archives II, College Park, Maryland, March 6-8.

Low Altitude Remote Sensing

National Park Service - Denver Service Center, Hawaii State Historic Preservation Office, University of Hawaii

The Center is supporting a demonstration project involving the detection of archeological sites and features by means of low altitude, aerial remote sensing using radio-controlled airplane technology. Photo-enhancement and mapping software also will be tested in order to manipulate images for feature identification and mapping, and to allow their incorporation into a GIS database.

Second International Conference on Wood Protection with Diffusible Preservatives

Forest Products Society

The Center is providing support for this three-day conference to be held in Mobile, Alabama, November 6-8, 1996. The conference's primary objective is to provide attendees with current technical information on the use of water-diffusible preservatives in pest control and in the preservation of wood products. The Center is keen to ensure that historic preservation is represented at this technical conference, and the Center is working with conference organizers to find individual speakers whose practical experience includes the use of diffusible preservatives in historic structures.

Analytical Services in Support of Historic Preservation

Frank Preusser and Associates

Dr. Frank Preusser is undertaking a survey of non-profit and for-profit analytical laboratories willing to and capable of providing technical analyses to preservation professionals. This survey is an investigative step towards defining the Center's role in providing analytical services.

For further information on these projects, contact Mark Gilberg.



Preservation and Conservation Consultations

The Center recently is active in providing expert consultations to nearby cultural resources organizations and sites. Recent consultations include –

Alexandria Historical and Genealogical Library and Museum, Alexandria, Louisiana.

The Library and Museum are housed in a city-owned 1907 Carnegie Library located on the “center square” of Alexandria’s original 1805 plan – a square “dedicated to cultural use”. The Carnegie Library is listed on the National Register of Historic Places.

The consultation includes preparing a conditions assessment and an outline of recommended preservation strategies. The Alexandria Historical and Genealogical Society will seek to implement the recommendations in cooperation with the City and a strong local foundation that supports community preservation efforts.

Meadows Museum of Art, Centenary College of Louisiana, Shreveport, Louisiana.

The Museum is seeking to implement recommendations from a 1990 Conservation Assessment Program report, and sought from the Center an expert opinion on the nature and extent of the work required to rehabilitate the Museum’s windows and masonry exterior. The Museum is housed in a 1925 building within the campus’ National Register district.

The consultation includes a conditions assessment and a report of preservation priorities, which the Museum will use to complete fundraising and to begin needed construction. This consultation grew from a recent *SOS!* volunteer training session at the Museum that included Mark Gilberg, Fran Gale and Louisiana *SOS!* Coordinator Sarah Luster.

Memphis Landing: Cultural Resources Assessment and Preservation Plan, Memphis, Tennessee.

On the east bank of the Mississippi River at Memphis is the approximately 9-acre cobblestone landing developed in the mid-nineteenth century as a major US outdoor commodities exchange devoted exclusively to cotton. Most of the landing remains intact and in use as a compelling historic site. The assessment and plan commissioned by the City of Memphis is a first step towards comprehensive preservation of the site and conservation of the landing’s component materials.

At the request of Memphis Heritage, the Center is consulting on preservation and design issues for this complex and important cultural landscape – including review of draft reports to the City, and support for the draft report’s preliminary findings and recommendations.

A Comprehensive Plan for the Natchitoches Historic District

City of Natchitoches-Natchitoches Historic District Commission

The **Natchitoches Historic District** comprises commercial and residential properties on the east and west sides of Cane River Lake in central Natchitoches. The district was listed on the National Register of Historic Places in 1974 and designated an National Historic Landmark in 1984. The City of Natchitoches is commissioning a comprehensive plan for the district that will address preserving and enhancing the existing district resources, and resolving questions of traffic, parking, district boundaries and pressure for development within the district.



The Center is assisting the Natchitoches Historic District Commission to prepare a request for proposals for the comprehensive plan and to review proposals. As part of developing a comprehensive plan, the Center also has consulted with the Natchitoches Historic District Commission on submitting a grant application to the Johanna Favrot Fund for Historic Preservation, administered by the National Trust for Historic Preservation. The Favrot Fund application focuses on funding an economic development consultant to advise the City on rehabilitating Natchitoches’ early 20th century downtown hotel and theater complex.

The Center’s Gopher

The Center’s Internet **gopher** recently has been updated with preservation laws and regulations. Full texts of the following legislation and regulations is available now via the Center’s gopher.

Legislation: Antiquities Act, Archeological and Historic Preservation Act, Archeological Resources Protection Act, Historic Sites Act, Native American Graves Protection and Repatriation Act, American Indian Religious Freedom Act, Amendment to Reservoir Salvage Act, National Historic Preservation Act, National Environmental Policy Act.

Regulations: National Register of Historic Places; National Historic Landmarks Program; Native American Graves Protection and Repatriation Act; Determinations of Eligibility for Inclusion in the National Register of Historic Places; Protection of Archeological Resources; Protection of Historic and Cultural Properties; Preservation of American Antiquities; Secretary of the Interior’s Standards for Historic Preservation Projects; Historic Preservation Certifications Pursuant to the Tax Reform Act of 1976, the Revenue Act of 1978, the Tax Treatment Extension Act of 1980, and the Economic Recovery Tax Act of 1981; Curation of Federally Owned and Administered Archeological Collections; Historic Preservation Requirements of the Urban

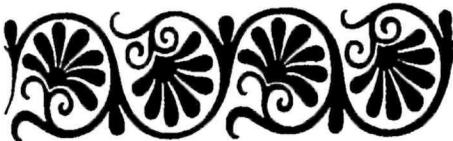


Development Action Grant Program; Procedures for Implementation of National Environmental Policy Act; Freedom of Information Act Regulations; Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Advisory Council on Historic Preservation; Procedures of Approved State and Local Government Historic Preservation Programs.

The gopher's address is ***gopher://gopher.ncptt.nps.gov***. To access legislation and regulations, choose option 10 (Preservation Law). Contact Mary Carroll for more information or assistance.

The Center on the World Wide Web

The Center now has a presence on the **World Wide Web**. The address for the Center's home page is **<http://www.cr.nps.gov/ncptt>**. All of the information on the Center's gopher is accessible via this home page. As with most World Wide Web sites, expect modifications, improvements, and expansion in the future. Comments are always appreciated. Contact Mary Carroll for more information.



The Center Announces NCPTT Research Fellow

The Center announces the selection of **Ms. ElizaBeth Bede** as the 1996 NCPTT Research Fellow. ElizaBeth is a Paul Coremans Fellow in the University of Delaware doctoral program in Art Conservation Research. She is an architectural conservator whose specialty is masonry. ElizaBeth received a B.A. in physics with minors in art history and mathematics, in 1985 from Gettysburg College. In 1990 she completed her master's degree in historic preservation at the University of Pennsylvania after graduate studies in architectural design at

Virginia Polytechnic University. Additionally, she completed a certificate program at ICCROM in stone conservation. ElizaBeth is a member of AIC's Architectural Documentation Committee, an avid SOS/ participant, and a member of ASTM's "Building Preservation and Rehabilitation Technology" subcommittee. ElizaBeth's doctoral studies will focus on carbonate stones.



The Center Welcomes New Interns

The Center extends a warm welcome to its two new interns, **Marvis L. Chance** and **Kris Vidos**.

Marvis is a graduate student in NSU's History-Cultural Resource Management program. His undergraduate degree is in history with an anthropology minor. He is retired from the US Army and has worked as a college instructor for Central Texas College. Marvis will assist Fran Gale in identifying training opportunities accessible through the Internet. In addition, he will help compile and organize information about workshops and courses offered by the Center and other preservation organizations.

Kris is an undergraduate in NSU's Division of Business, in their Computer Information Systems program. Kris will assist Mary Carroll with information management tasks at the Center including maintaining the Center's computer equipment, updating the gopher and World Wide Web page, configuring and maintaining the Center's fax-on-demand system, and helping staff with other computer-related tasks.

Marvis and Kris are welcome additions to our staff and we are pleased to have them on board through Spring and Summer.

NCPTT Library

With several recent acquisitions, NCPTT has begun developing a conservation and preservation library. Materials in NCPTT's library will include books, periodicals, newsletters, tapes, CDs and other media.

At the outset, **Mark Gilberg**, NCPTT's Research Coordinator, will serve as our librarian. Library holdings will be abstracted and on-line via NCPTT's gopher, and acquisitions will be cited in these *Notes*. The library is a necessary reference resource for NCPTT staff, and will be available to NCPTT interns and fellows, and to students in Northwestern State University's heritage resources program.

Recent acquisitions include 35 bound volumes of *Pencil Points* issues published between 1923 and 1945. These *Pencil Points* – "an illustrated journal for the drafting room" – are a generous donation from John Hopkins and Marsha Oates of Hopkins & Associates, preservation consultants in Memphis, Tennessee. Early *Pencil Points* are excellent for tracing the development of 20th century building techniques and materials.

Another donation is the recently-issued *America Preserved*, "a checklist of historic buildings, structures, and sites", that includes state and county citations for drawings, photographs, field notes and written data that comprise the current Historic American Buildings Survey/ Historic American Engineering Record collections. *America Preserved* is published by the Library of Congress' Catalog Distribution Service on the occasion of HABS's 60th anniversary and HAER's 25th. This volume was donated to the Center by HABS/HAER.

NCPTT would be pleased to consider donations, including books and back-issues of periodicals in conservation and preservation. (And NCPTT can cover shipping costs.) Contact Mark Gilberg to discuss donations.



THE RECENT PAST

Louisiana SOS!

Monroe, Louisiana

February 9

Louisiana SOS! presented a volunteer training workshop in Monroe, Louisiana on February 9, 1996, at the Masur Museum of Art. Sarah Luster, Fran Gale, and Mark Gilberg conducted the session. Volunteer assignments to document public outdoor sculpture are in progress.

Another phase focused on surveying outdoor sculpture in private collections has been initiated in north Louisiana. In the following months, all *SOS!* survey questionnaires should be completed and reviewed for submission to *SOS!* with a target completion date of early Summer.

Opening Doors: The Southeast Regional Conference on African-American Historic Preservation

Charleston, South Carolina

February 8-10

A three-day conference on developing African American preservation initiatives was organized by the **South Carolina African American Heritage Council** and the **South Carolina Department of Archives and History**. The conference included nearly 100 representatives of 13 states. Major sponsors of the conference included local companies and foundations and the **Southern Regional Office of the National Trust for Historic Preservation**.

Conference topics included preservation basics, heritage tourism, archeology and African American preservation, interpreting African American resources, and housing and historic neighborhoods.

John Robbins represented the Center at the conference and served as a panelist in a session on sources of project funding. John also attended a planning meeting of the **Southeast Regional African American Preservation Alliance**. The work of SRAAPA focuses on developing state-by-state heritage organizations, and supporting the work of heritage

organizations. SRAAPA will plan towards taking its 1998 meeting to the Natchitoches area.

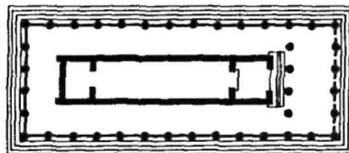
Annual meeting of the Louisiana Office of State Parks/Recreation, Tourism and Wildlife Committee

Lake Fausse Pointe State Park

February 15-16

Louisiana's **Recreation, Tourism and Wildlife Committee** is a coordinating council of Federal and State agencies involved in tourism, cultural resources and outdoor recreation. The Committee recognizes the importance of *networking and partnering*. The meeting near St. Martinville, Louisiana, served to establish new relationships among programs and agencies and to reinforce long-standing relationships.

The Center and other National Park Service initiatives in Natchitoches Parish were represented by John Robbins. John reviewed the Center's mission, its organization and programs — including the PTT Grants program. As an immediate result of the Office of State Parks meeting, the Center is helping to develop a Louisiana statewide conference on interpretation at rural historic sites, to be held at Natchitoches in October 1996.



Preservation Leadership Training

Natchitoches,

January 13-20

Working with the **National Trust for Historic Preservation**, the Center co-sponsored a **Preservation Leadership Training** workshop in January. Local partners for this week-long workshop were the **Association for the Preservation of Historic Natchitoches**, **Natchitoches Historic Foundation, Inc.**, **Main Street Natchitoches**, and the **City of Natchitoches**. The 36 participants

attending the workshop included government officials, and board and staff members of private, non-profit preservation organizations from sixteen states.

Classroom instruction for this week of intensive training covered topics such as building community leadership, creating a positive public image, maximizing human resources, developing membership, strategic planning and budgeting, fundraising, economics of preservation, and legal tools.

Using Natchitoches as a learning laboratory, PLT participants applied the information gained through classroom instruction in seeking solutions to practical problems. PLT teams explored adaptive use of "white elephants" such as the Hotel Nakatosh, transportation planning and the potentially adverse effects of widening a downtown Natchitoches bridge, site location and construction of a downtown conference center in Natchitoches, developing a master plan for the historic district, and redeveloping the fringe area surrounding the historic district.

During the week, each PLT team examined a topic in depth. Site visits were conducted; local business and civic leaders were interviewed; and the information provided by the team leaders was considered. The week culminated with a public presentation of the teams' observations and recommendations. PLT teams' reports were immediately recognized as important components in continuing the preservation and development of historic Natchitoches.

THE NEAR FUTURE

March 8-15

Timber Framing Workshop

East Texas

The **Timber Framers Guild of North America**, in cooperation with the **NCPTT** and the **Texas Department of Parks and Wildlife**, will offer a hands-on class in timber framing March 8-15 in Nacogdoches and Tyler, Texas. The class project will be the cutting and raising of a pavilion for the East Texas Ecological Education Center near Tyler. Class



instructors include expert timber framers from throughout the United States.

Timber framing skills were almost lost in the twentieth century as construction using small-dimension lumber and nails replaced the older framing methods. A timber framing revival began in the 1970s and coalesced in the group which later formed the Timber Framers Guild. For further information, call Tim Chauvin in Nacogdoches, 409/564-9465, or Fran Gale at the Center. To register, contact the Guild: 360/733-4001 or SharGr@aol.com.

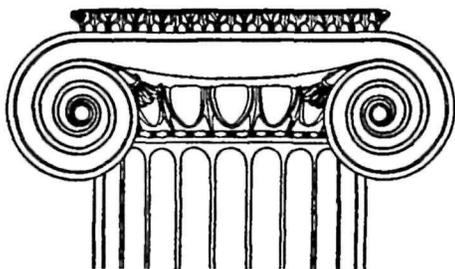
April 19-21

Preservation Weekend

Austin, Texas

A **Preservation Weekend** is planned for owners and managers of historic properties April 19-21 in Austin. The workshop will provide information about purchasing, restoring or rehabilitating, and maintaining historic properties and will demystify topics such as project financing, applying for "Tax Act" credits, and working with historic district commissions. The Center's partners for the Austin Preservation Weekend are the **Texas Historical Foundation**, **Texas Historical Commission**, and the **Historic Preservation Program** at the **University of Texas**.

Sessions will showcase the skills of craftsmen demonstrating masonry repairs, metalworking, and stained glass. Participants will learn how to inspect historic properties and to determine original paint schemes. A special session on the use of computers in preservation will link these traditional skills to contemporary technology. The workshop will conclude with a session "putting it all together" followed by a tour of historic sites in Austin. Contact Fran Gale for additional information.



May 16-18

Southern Landscapes: Past, Present and Future

Oxford, Mississippi

This three-day conference is sponsored by the **University of Mississippi's Center for the Study of Southern Culture**, the **National Park Service-Natchez Trace Parkway** and the **Mississippi Department of Archives and History**.

The conference will examine the multi-layered cultural landscape of the American South, and will include presentations by speakers from the fields of archeology, historic preservation, landscape architecture, history, cultural geography and anthropology. **NPS Director Roger Kennedy** will be a keynote speaker. For further information contact Jennifer Bryant at the Center for the Study of Southern Culture, 601/232-5993; e-mail: staff@barnard.cssc.olemiss.edu.

June 10-11

Preservation of Collections: Assessment, Evaluation and Mitigation Strategies

Norfolk, Virginia

One and one half days of presentations and hands-on examples are designed to bring museum professionals up-to-date on cost effective solutions to preservation needs of materials held in museums, libraries, and other repositories. The workshop will present an interdisciplinary approach to integrating collections care, management, and museum administrative concerns using the knowledge and technical information gained from practical experience. The workshop is a pre-session to AIC's 24th Annual Meeting in Norfolk. For more information, call NCPTT's fax-on-demand system, 318/357-3214.

October 31-November 3

AIA/HRC-AIA/ASG meeting

Alexandria and Natchitoches, Louisiana

The **Architecture Specialty Group** of the **American Institute for Conservation of Historic and Artistic Works** will join the **American Institute of Architects' Historic Resources Committee** at its Fall meeting in north Louisiana. This conference will be the first

co-meeting of architectural conservators and preservation architects, and a lively exchange is planned.

The meeting agenda will be featured in upcoming editions of *Notes*. For more information, call the AIA/HRC information line, 202/626-7482, or John Robbins.

September 26-October 1

APT96: Building Ideas/Idées à Bâtir *Winnipeg, Manitoba*

The Association for Preservation Technology International's 1996 Annual Conference will convene in Winnipeg September 26-29, followed September 29-October 1 by two **APT Training Workshops** on conservation masonry and log construction. **NCPTT** is a co-sponsor, along with **Canadian Heritage** and the **Province of Manitoba**. For further information call the Center's fax-on-demand service, 318/357-3214.



MAIL CALL

The initial mailing of this issue of *Notes* included an insert announcing The Association for Preservation Technology's 1996 Annual Conference. Many copies of *Notes* and the insert were mailed using labels provided by APT — labels that include "MBR#" above the recipient's name. Most of these APT-member names and addresses are not included on the Center's mail list. APT members who are not on the Center's mail list and would like to receive future editions of *Notes* should notify the Center.



Notes from the Center

March April 1996

Editor

Mark Gilberg

Associate Editor

Mary F. Striegel

Contributing Editors

Mary S. Carroll

Jim Ebert

Fran Gale

Sarah Luster

Elizabeth Lyons

John Robbins

Our address

NCPTT

NSU Box 5682

Natchitoches, LA 71497

Telephone

318/357-6464

Facsimile

318/357-6421

E-mail

NCPTT@alpha.nsula.edu

Gopher

gopher.ncptt.nps.gov

Web<http://www.cr.nps.gov/ncptt>**Fax-on-demand**

318/357-3214

Notes from the Center is published by the National Park Service's National Center for Preservation Technology and Training.

National Park Service

Roger G. Kennedy

Director

Katherine H. Stevenson

*Associate Director, Cultural Resource**Stewardship and Partnerships***Preservation Technology and Training Board**

Elizabeth A. Lyon

Chair

Robert Z. Melnick

*Vice-Chair*E. Blaine Cliver *Designated Federal Official*

Neville Agnew

Nicholas Gianopoulos

Alferdteen B. Harrison

James K. Huhta

W. James Judge

Christy Johnson McAvoy

F. Blair Reeves

Carolyn L. Rose

Frank Emile Sanchis, III

NCPTT

Carolyn Breedlove

Training Intern

breedlovec@alpha.nsula.edu

Mary S. Carroll

Information Management Specialist

mcarroll@alpha.nsula.edu

Marvis L. Chance

Training Intern

Frances Gale

Training Coordinator

gale@alpha.nsula.edu

Mark Gilberg

Research Coordinator

gilbergm@alpha.nsula.edu

Sarah Luster

Louisiana SOS! Coordinator

lusters@alpha.nsula.edu

John Robbins

Executive Director

jrobbins@alpha.nsula.edu

Mary F. Striegel

Research Associate

striegelm@alpha.nsula.edu

Kris Vidos

Information Management Intern

nsvid9088@alpha.nsula.edu

The National Center for Preservation Technology and Training promotes and enhances the preservation of historic resources in the United States for present and future generations through the advancement and dissemination of preservation technology and training.

*The Center, created by Congress, is an interdisciplinary effort by the National Park Service to advance the art, craft and science of historic preservation in the fields of **archeology, historic architecture, historic landscapes, objects and materials conservation, and interpretation.** The Center serves public and private practitioners through research, education and information management.*

*– NCPTT mission statement, adopted at the Fall 1995 meeting of the **Preservation Technology and Training Board***
