

**MONTGOMERY C. MEIGS ORIGINAL CHAPTER  
SOCIETY FOR INDUSTRIAL ARCHEOLOGY**

**30<sup>TH</sup> ANNUAL CONFERENCE**

**MAY 10-14, 2001  
WASHINGTON, DC**

**WELCOME BACK TO WASHINGTON FOR SIA'S 30<sup>th</sup> ANNIVERSARY**

The Society for Industrial Archeology was founded in Washington, DC, in 1971. Join the Montgomery C. Meigs Original Chapter for the thirtieth anniversary of the Society as we explore the industrial and engineering legacy of the nation's capital. What legacy, you ask? Few would consider Washington fertile ground for the exploration of industrial heritage. The "business" of Washington is the federal government, which evokes images of government buildings amidst landscaped settings. However, this bureaucratic monolith evolved its own unique industrial character, fed by the need to construct immense government buildings and the requirement to support a growing population of government workers. While Washington's industrial heritage never reached the magnitude, concentration, or character of Pittsburgh, Buffalo, or other "smoky" cities, the district offers a dispersed industrial heritage unique to its role as the seat of our federal government. Come explore Washington's printing industry, canals, defense plants, water works, bridges, power plants, mills, cast-iron building elements, and other aspects of the capital region's industrial and engineering past.

**CONFERENCE HEADQUARTERS**

The Renaissance Washington DC Hotel is located at 999 Ninth St., NW at the corner of Ninth & K streets, fronting Mount Vernon Square. Hotel parking is available at \$15 per day. The Renaissance is two blocks from the Gallery Place/Chinatown Metro station. A block of rooms reserved at the hotel for conference registrants will be held through April 30. Conference rates are \$120/single and \$145/double. All rates are subject to DC's 14.5% sales tax. Reservations can be made with the hotel by calling 202-898-9000 or at [www.RenaissanceHotels.com](http://www.RenaissanceHotels.com). Please make your reservations early as the hotel is likely to sell out.

## **LOCATION/TRANSPORTATION**

*Directions by car, from South:* Take I-395 tunnel beneath the Mall. Exit at Massachusetts Ave. Turn left at light, drive six blocks, turn left on K St. at Mt. Vernon Place, and left on Ninth (for check in). Turn left on Eye (I) St. for parking.

*From West:* Take I-270 from Frederick to Capitol Beltway south/west towards Virginia. After crossing Potomac River bridge, take first exit, George Washington Memorial Parkway. Follow signs to I-395 north and follow directions above.

*From North:* Take I-95 to Capitol Beltway to Baltimore-Washington Parkway to New York Ave. Turn left at Ninth St.; hotel is on your left below K St.

*By air:* Washington is served by three airports: Reagan National (fifteen minute ride, Metro accessible); BWI (forty-five minute ride, rail accessible); and Dulles (forty-five minute ride). Several shuttle service options are available: Washington Flyer offers a \$26 round trip fare from Dulles to the Convention Center (703) 685-1400. Super Shuttle serves all three airports directly to the hotel: \$9 from National, \$24 from Dulles (\$10 additional passengers), \$30 from BWI (\$8 additional passengers) at (800) 258-3826. (Fares one way only)

*By rail:* The Renaissance is a short cab ride from Union Station or two stops on the Metro Red Line to Gallery Place Metro (exit at 9th Street).

### **Additional Information**

General Info: Christopher Marston, Conference Co-chair  
202-343-1018 christopher\_marston@nps.gov

Lodging: Renaissance Washington D.C. Hotel  
202-898-9000

Registration: Don Durfee, SIA Headquarters Coordinator  
906-487-1889 sia@mtu.edu  
<http://www.ss.mtu.edu/IA/sia.html>

**Host Committee:** Dean Herrin, Christopher Marston, Co-Chairs; Thomas Behrens, Todd Croteau, Lisa Davidson, Eric DeLony, Dana Lockett, Marilyn Harper, Sara Leach, Rex McClain, Richard O'Connor, Richard Quin, David Shayt, Joel Sphrentz, Barry Virts, Robert Vogel, Helena Wright.

**Conference Sponsors:** Montgomery C. Meigs Original Chapter of the SIA, National Park Service, Historic American Engineering Record, Smithsonian Institution, Historical Society of Washington.

## SCHEDULE AT A GLANCE

### THURSDAY, MAY 10, 2001

8:00am - 1:00pm Beretta U.S.A. Corp. Tour  
2:00pm - 5:30pm Pre-conference Tours & Exhibits  
6:30pm - 9:00pm Welcoming Reception and opening lecture by Richard Longstreth at the Carnegie Library, Mount Vernon Square.

### FRIDAY, MAY 11, 2001

8:00am - 5:30pm All Day Tours  
5:30pm - 7:30pm Newcomers Gathering in the Hospitality Suite. Looking to meet new members and newcomers to the SIA? Wondering about how you can contribute, or just want to meet people with similar interests? The Newcomers Gathering is where the new and not so new can meet with those interested in new-member issues. Hors d'oeuvres and beverages will be provided.

8:00pm - 11:00pm Show and tell

### SATURDAY, MAY 12, 2001

Breakfast on your own

8:30am - 10:00am Paper Session I  
10:00am- 10:30am Break  
10:30am- 12:00pm Paper Session II  
12:15pm- 2:15pm Lunch - Annual Business Meeting  
2:30pm - 4:30pm Paper Session III  
6:30pm - 10:00pm 30<sup>th</sup> Anniversary Banquet, Smithsonian Castle

### SUNDAY, MAY 13, 2001

8:00am - 11:00am IA Bike Tour  
9:00am - 1:00pm Industrial Georgetown Walking Tour  
11:00am- 1:00pm Building Museum and HAER Exhibit  
12:45pm- 3:30pm: C & O Canal Boat Tours

### MONDAY, MAY 14, 2001

7:30am - 6:30pm IA of Upper Potomac Tour

### Free Exhibits to see in D.C.

#### **National Building Museum** (Sixth & F Sts., NW):

"Monuments, Mills, and Missile Sites: 30 Years of the Historic American Engineering Record."  
Hours: Monday-Sat: 10:00am - 5:00pm, Sunday: 11:00am-1:00pm special viewing, open to public until 5:00pm)

**Smithsonian National Museum of American History** (Fourteenth St. & Constitution Ave., NW): Featuring a 30th anniversary display of unusual SIA artifacts and rare archival documents. Never before seen by the public! Plus your last chance to see the Halls of Bridges, Tunnels, and Railroads before they close permanently! Open 10:00am -5:30pm daily.

## CONFERENCE TOURS

### THURSDAY, MAY 10

#### **Tour T1: Beretta U.S.A. Corp. Tour** (8:00am-1:00pm)

This early bird tour will visit Beretta U.S.A. Corp. in Accokeek, MD to see the intricate technology of firearms production .

#### **Tour T2: Architectural Walking Tour** (2:00pm-4:00pm)

This sidewalk tour will explore DC's old downtown, a rejuvenated urban district featuring an eclectic mix of old and new commercial architecture.

#### **Tour T3: Capital Dome Tour** (2:15pm-4:30pm)

This tour offers a rare glimpse of the recently restored Meigs - Walter cast-iron frame. (Tour will be limited to 14, selected by lottery, and is subject to cancellation by the Architect of the Capitol's Office).

#### **Tour T4: Construction Tour** (3pm - 5pm)

Tour the construction of the new Washington Convention Center, scheduled for completion in 2003 and currently the largest excavation site in the Western Hemisphere.

### FRIDAY, MAY 11

#### **Tour F1: Montgomery C. Meigs and Washington's Water Supply**

The local SIA chapter's namesake began construction of Washington's water supply system in the 1850s. This tour will explore many of his original structures, as well as modern improvements to the system. Stops include the Great Falls, MD, gatehouse and dam; the Cabin John Aqueduct Bridge (the longest single-span masonry arch bridge in the world when completed in 1863); the Dalecarlia Reservoir and Treatment Plant; the Georgetown Reservoir; the McMillan Reservoir and Sand Treatment System Plant; and the Bryant Street Pumping Station (which also houses a small museum of system artifacts).

#### **Tour F2: Flying Buttresses, Vaults, and Cast-Iron Frames: Historic Structures**

This tour will visit a number of Washington landmarks for behind-the-scenes looks at structural technologies. Themes will include nineteenth century fireproofing, innovative federal buildings, and contemporary adaptations of Gothic architecture. Sites are the National Cathedral, the Smithsonian Castle, the Smithsonian's Arts and Industries Building, the General Post Office (Tariff Commission), and the Patent Office. The tour will end at the National Building Museum, the former Pension Building, designed and built by Montgomery C. Meigs in the 1880s.

### **Tour F3: Historic Bridges of DC and Beyond**

Join pontists Eric DeLony, Robert Vogel, and Justin Spivey on a rigorous tour of the bridges of the capital region. The tour will start with a journey beyond the beltway to see the Bollman Bridge at Savage, MD and the legendary Thomas Viaduct. Other spans include Meigs' Cabin John Aqueduct Bridge and Rock Creek cast-iron (Pennsylvania Avenue) Bridge; Taft Memorial Bridge; Key Bridge; and a 1910 pin-connected B & O RR truss. [Be prepared for a long day of traveling long distances and climbing around trusses and up steep embankments to fully appreciate all the elements of these interesting structures.]

### **Tour F4: Defense Technologies**

Defense is a Washington industry, and this tour starts at the White Oak Naval Weapons Research Center to see Cold War-era munitions facilities including a Hydro-ballistic Test Tank, and a High Gravity Centrifugal Pit. Next stop is the Naval Surface Warfare Center in Carderock, MD, and its large testing facilities, including the David Taylor Model Basin. The final stop will be Advanced Marine Engineering in Crystal City, VA, and computer modeling of naval weapons systems. [For security reasons, non-U.S. citizens must provide specific personal information 10 days prior to the tour. Those affected will be notified prior to the conference.]

### **Tour F5: Printing, Power, and Milling**

This tour will explore a variety of industries prominent in Washington's past, including printing, power generation, and milling. Stops will feature the Government Printing Office, the largest in-plant printing operation in the nation; the PEPCO Potomac River Generating Station in Alexandria, VA; and the Colvin Run Mill, near Great Falls, VA, a restored, operational ca. 1811 gristmill with a blacksmith shop, general store, and millers house.

### **Tour F6: Printing, Flying, and Farming**

Although historically not a center of industrial activity, the Washington region boasts an eclectic mix of technology-oriented companies and government agencies. This tour will explore four examples: the Bureau of Engraving and Printing, where 24 presses produce 37 million currency notes per day; the Washington Navy Yard, including remnants of the ordnance research and development that occurred on the premises; the Paul E. Garber Preservation, Restoration, and Storage Facility, a center of the National Air and Space Museum, and home to nearly 200 air- and spacecraft awaiting restoration or in storage; and Mount Vernon, to see the current archeological excavation of Washington's distillery (1797), a reconstructed gristmill, and a 16-sided treading barn.

### **Tour F7: Harpers Ferry and C&O Canal**

Harpers Ferry was once a vibrant industrial village, home to the U.S. Armory and Arsenal. This tour will explore the industrial archeology of Harpers Ferry and Virginus Island, as well as the Potomac Power Plant, a converted paper mill that produced power until 1991. The next stop will be the still-active Eastalco Aluminum Plant in Adamstown, MD. The final site on the tour will be the Monocacy Aqueduct, the longest aqueduct on the Chesapeake & Ohio Canal. [Note: Eastalco requires long-sleeved shirts and sturdy shoes - no skirts, sandals or tennis shoes. No one allowed with a heartbeat regulator or laryngectomy; no children under the age of 13, and no cameras or video equipment.]

### **SUNDAY, MAY 13**

#### **Tour S1: IA Bicycle Tour (8:00am - 11:00am)**

Bring your own or rent one from the nearby Blazing Saddles bike shop (approx. \$25, located at 11th & G Sts). We will ride the Capital Crescent rail-trail through the 1910 Dalecarlia Tunnel, over a 1910 pin-connected B & O RR truss, along the C & O Canal to Georgetown, and past mill sites and bridges in Rock Creek Park.

#### **Tour S2: Industrial Georgetown Walking Tour (9:00am - 1:00pm)**

The real industrial history of Washington begins in Georgetown, terminus of the fabled C & O Canal, and home to a crowded array of early industrial structures transformed into posh eateries, boutiques, and power brokers' offices. The adjacent Potomac River, once the life blood of Georgetown's iron foundries, paper mills, and lime kilns, today forms a pastoral backdrop to malls, hotels and doctor's clinics. The area remains alive with pedestrian and street traffic in the best traditions of adaptive reuse, as protected architecture in the heart of a great city receives evermore loving care from restoration specialists and those who occupy these once gritty structures. Note: Those interested may meet up with the Canal Ride Tour at the C & O Canal Ranger Station by Lock 3 in Georgetown.

#### **Tour S3: National Building Museum (11:00am - 1:00pm)**

The former Pension Building, designed and constructed by Montgomery C. Meigs, features one of the nation's premiere interior spaces. SIAers will have a private tour of the building and a chance to explore exhibits, including "Monuments, Mills, and Missile Sites: 30 Years of HAER," and a permanent exhibit on Meigs.

#### **Tour S4: Canal Rides (12:45pm - 3:30pm)**

Relive the heyday of the C & O Canal as you ride aboard a barge embarking from Georgetown. A National Park Service interpreter will discuss the technology of canals as you glide along the canal under mulepower.

## **MONDAY, MAY 14**

### **Tour M1: IA of the Upper Potomac**

We will journey through this rural industrial region via Williamsport, MD, to Martinsburg, WV, to see the 1866 B & O West Roundhouse with its unique cast-iron framing. We will continue to Allegheny Energy's still-active Dam No. 4 power station and its rope-driven generators. Next we'll visit the ruins of the ca. 1829 Boteler's Cement Mill, integral to producing hydraulic mortar for the construction of the nearby C & O Canal; pass by the Antietam Ironworks; and return via the industrial relics of Harpers Ferry, WV.

### **Note to Participants:**

As with all SIA tours, the 2001 conference tours are dependent on the willingness of site managers to permit visits. Though we expect all tours to proceed as described, tour contents may change based on site availability or other factors. Registrants will be notified of any changes.

## **PAPER SESSIONS**

### **Session I: 8:30 - 10:00**

#### **Panel I. A: Rehabilitating Industrial Artifacts**

Eric C. Stovener, Emmanuel E. Velivasakis, Charles H. Thornton, Glenn G. Thater, Christopher P. Pinto. *A Report on the Rehabilitation of the Cast Iron U.S. Capitol Dome*

Denis J. McMullan, Robert J. Kapsch, *Rehabilitation of the Monocacy and Conococheague Aqueducts of the Chesapeake & Ohio (C & O) Canal*

#### **Panel I. B: Pennsylvania from East to West**

David Rotenstein. *A Survey of Pittsburgh's Leather Industry: 1800 - 2000*

Paul Marr. *Rural Industries and the Pennsylvania Mainline Canal System*

Robert Howard. *The Chadds Ford Water Powered Generating Station*

#### **Panel I. C: Locating and Presenting Historic Industries**

Daniel Bonenberger. *Surviving Historic Industries*

Wolfgang Ebert. *Industrial Heritage Tourism in Europe*

Richard Quin. *Washington and the National Meridian*

#### **Panel I. D: 18th Annual Historic Bridge Symposium**

Eric DeLony. *State of the Bridge*

Steven Englehart. *Advocating and Educating for Bridge Preservation in Rural Northern New York*

William D. Middleton. *The Tragedy and Triumph of the Quebec Bridge*

David Simmons. *Work in Progress: "If You Can't Lower the River, Raise the Bridge"*

Todd A. Milano. *Work in Progress: "Yesterday's Bridge for Today's Students to Become Tomorrow's Business Leaders"*

**Session II: 10:30 - 12:00**

**Panel II. A: The Urban Infrastructure**

Steven R. Strohmeier. *Capitalizing on the Hill: The History, Impact and Remains of the Washington, DC Streetcar System, 1862-1962*

Dennis J. Connors. *Bringing the Finger Lakes to Syracuse: The 19th Century Challenge of Finding a Municipal Water Supply for the Salt City*

Jane Mork Gibson. *Early Urban Water Supply in Philadelphia*

**Panel II. B: IA of Government Facilities**

Sara E. Wermiel. *U.S. Army Engineers and Development of Iron Skeleton Lighthouse Construction*

Edward Morin. *The Virginia Shipbuilding Corporation, 1918-21*

Robert Stewart. *Can a Buzzard Fly? The National Advisory Committee on Aeronautics (NACA) and Some Early Facilities for Aerodynamics Research at Langley Air Force Base*

**Panel II. C: Industry in the Great Lakes Region**

Michael J. Madson. *Archaeological and Historical Investigations of Pittsburgh and Boston Copper Harbor Mining Company Operations, Copper Harbor, Keweenaw Peninsula, Michigan*

Amanda Gronhovd. *The Soudan Mine and Its No.8 Engine House*

Stanley J. Popovich. *The Process of Completing HAER Documentation of the Hulett Ore Unloaders, Cleveland, Ohio*

**Panel II. D: 18th Annual Historic Bridge Symposium: Learning from Historic Bridge Management**

Mark Hufstetler, Mitzi Rossillon. *Reinventing the Wheel: Comparisons of Statewide Historic Bridge Management Efforts*

Amy Squitieri. *Where Do We Go from Here, Now that All Our Inventories are Wrapping Up?*

Thomas Lester. *Historic Bridge Management in Practice: An Engineer's Perspective*

**Lunch - Annual Business Meeting: 12:15pm - 2:15pm**

**Session III: 2:30pm - 4:30pm**

**Panel III. A: The Society for Industrial Archeology at Thirty Years**

Tim Tumberg. *On the Origin of Disciplines: The Evolution of the Society for Industrial Archeology*

Gary van Lingen & Elizabeth Norris. *SIA: The Next Thirty Years*

Discussion: *The SIA at Thirty Years*



### **Panel III. B: Making Iron**

Edward S. Rutsch. *Studies of the Cultural Landscapes of the New Jersey Highlands Charcoal Iron Industry*

Gordon Pollard. *A 19th Century Bloomery Iron Forge Revealed: Excavations in the Adirondacks of New York*

H. Marc Howell. *Antietam Iron Works, The McPherson & Brien Era, 1806-1853: A Family Works Changes with the Industry*

James Brothers, IV., Charles P. Swann, "Carried on at a Very Great Expense and Never Produced any Profit:" *Titanium and the Ruination of the Albemarle Ironworks, 1770-1772*

### **Panel III. C: Harmony Brickworks, Leetsdale, Pennsylvania**

Roy Hampton. *The Harmony Brickworks and Turn of the Century Brickmaking Technology in Allegheny County, PA*

R. Joe Brandon. *Interpretation of the Harmony Brickworks Site*

James C. Foura. *Use of Computer Mapping and Imaging at the Harmony Brickworks*

### **Panel III. D: 18th Annual Historic Bridge Symposium**

Sheila Rimal Duwadi. *National Historic Covered Bridge Preservation Program*

Mark M. Brown. *Reclaiming the History of the Vernacular Suspension Bridge*

Pete Brooks. *Design and Construction of Concrete Truss Bridges*

David Guise. *Rogue Bridges: Deviations from Mainstream 19th Century Truss Forms*

Edward Windhorst. *Restoration of the 1854 Haupt Truss Bridge at the Railroader's Museum, Altoona, PA*

## CONFERENCE REGISTRATION

\_\_\_\_\_  
Name

\_\_\_\_\_  
Spouse's/Guest's Name (registration required if attending tours)

\_\_\_\_\_  
Affiliation

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/Town:

\_\_\_\_\_  
State/Province      Country      Zip/Postal Code

\_\_\_\_\_  
Phone: home      office      fax

\_\_\_\_\_  
Email Address

**Member registration @ \$130 each**      **\$130**      \_\_\_\_\_

Non-member:      \$170      \_\_\_\_\_

Student:      \$80      \_\_\_\_\_

Sat. paper sessions & lunch only:      \$50      \_\_\_\_\_

Late fee (postmarked after April 30):      \$30      \_\_\_\_\_

Children Under 18:      no charge

Names & Ages: \_\_\_\_\_

**Thursday Tours**      **List first three preferences**

Tour T1: Beretta U.S.A. Tour      \$30      \_\_\_\_\_

Tour T2: Architectural Walking Tour      \$10      \_\_\_\_\_

Tour T3: Capital Dome Tour      \$10      \_\_\_\_\_

Tour T4: Construction Tour      \$10      \_\_\_\_\_

Thursday Reception: (check if attending)      Free      \_\_\_\_\_

**Friday Tours**      **List first three preferences**

Tour F1: Meigs Tour      \$40      \_\_\_\_\_

Tour F2: Historic Structures Tour      \$40      \_\_\_\_\_

Tour F3: Historic Bridges Tour      \$40      \_\_\_\_\_

Tour F4: Defense Technologies      \$40      \_\_\_\_\_

Tour F5: Printing, Power and Milling      \$40      \_\_\_\_\_

Tour F6: Printing, Flying and Farming      \$40      \_\_\_\_\_

Tour F7: Harpers Ferry and C & O      \$40      \_\_\_\_\_

**Newcomers Gathering (check if attending) Free**      \_\_\_\_\_

<b>Saturday Business Lunch</b>	<b>Free</b>	_____
Non registered guests	\$25	_____
<b>Saturday Banquet</b>	<b>\$35</b>	_____
<b><u>Sunday Tours (you can do more than one)</u></b>		
Tour S1:    Bike Tour	\$15	_____
Tour S2:    Georgetown Tour	\$15	_____
Tour S3:    National Building Museum	Free	_____
Tour S4:    C & O Canal Boat Tour	\$25	_____
<b><u>Monday Tour</u></b>		
Tour M1:    IA of Upper Potomac	\$40	_____

**Total Registration and Events**    \$    \_\_\_\_\_

**MEMBERSHIP**

Renewal for 2001: \_\_\_\_\_.      New Member: \_\_\_\_

Please check the level of membership you would like to join:

- \_\_\_\_\_ Individual \$35.00
- \_\_\_\_\_ Couple \$40.00 (One set of publications)
- \_\_\_\_\_ Full-time student \$20.00 (attach copy of ID)
- \_\_\_\_\_ Institutional \$50.00
- \_\_\_\_\_ Contributing \$75.00
- \_\_\_\_\_ Sustaining \$125.00
- \_\_\_\_\_ Corporate \$500.00

Total dues enclosed (U.S. funds): \_\_\_\_\_

There is an additional \$10.00 mailing charge for members outside North America.

Mailing fee for outside North America: \_\_\_\_\_

Additional contribution: \_\_\_\_\_

(for scholarships and special projects)

**Total registration, dues, contribution:** \_\_\_\_\_

**Make check payable to "SIA 2001"**

Note: Only hard copies of registration forms received by mail will be accepted. Tours will be filled in order of receipt. No faxed or emailed registrations accepted.

Payment Method    \_\_\_\_\_ Check    \_\_\_\_\_ Money Order    \_\_\_\_\_ Credit Card

Visa/MasterCard number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Name of cardholder: \_\_\_\_\_

Signature: \_\_\_\_\_

**Please Note: Checks must be in U.S. funds drawn on a U.S. bank.**

Mail payment and form to: SIA 2001

Department of Social Sciences

Michigan Technological University

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