

# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

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Number 3

## VIRGINIA IA 2018 ANNUAL CONFERENCE REVIEW

From May 31 through June 3, 2018, 166 registrants gathered in Richmond, Va., for the 47th Annual Society for Industrial Archeology Conference. This was the SIA's first annual meeting to be held in the Commonwealth of Virginia. The conference headquarters was the Omni Richmond Hotel, located within the historic Shockoe Slip district. The hotel sits above remains of the Kanawha Canal Basin, and just six blocks from Richmond's historic Main Street Station. The conference planning committee organized a full program of tours and paper sessions that took advantage of the former Confederate capital's unique mix of antebellum and post-Civil War industrial history that developed at the fall line of the James River. Tours featured Richmond's long history of metal processing, tobacco production, and maritime and transportation infrastructure, with explorations west to Charlottesville, east to the Virginia Peninsula, and south to Petersburg, covering a broad swath of the Old Dominion.

The conference followed a familiar schedule of early bird tours and a reception on Thursday; historic site and process tours Friday; paper sessions, annual business meeting, and banquet on Saturday; and optional tours Sunday. Attendees at Thursday's opening reception were treated to an orientation to the history of Richmond by Gregg Kimball, Director of Public Services and Outreach of the Library of Virginia and author of *American City, Southern Place: A Cultural History of Antebellum Richmond* (Univ. of Ga. Pr., 2000). Following a full day of paper sessions on Saturday, attendees celebrated at the Stone Brewery in Richmond's East End. Adjacent to the Fulton Gas Works site (operable from 1856–1956), the newly opened facility occupies 216,000 sq. ft. and is San Marcos, Ca.-based Stone's first brewery on the east coast.

The all-day early bird tour on Thursday, May 31 was a visit to the **University of Virginia** in Charlottesville and the **Crozet Tunnel**, about 80 mi. west of Richmond. The

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Patrick Harsbarger

The furnace and casting floor at O.K. Foundry.

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## ANNUAL CONFERENCE (continued from page 1)

area had seen 10 in. of rainfall the day before the tour. The tour generally followed the route of the Three Notch'd Road that was the original road west of Richmond from the 1730s. Ann L. Miller, historian with the Virginia Transportation Research Council, led the tour, assisted by Wayne Nolde, Staunton District Construction Engineer; and Steven Walton, SIA Executive Secretary.

The tour's first stop was at **University Hall** on the UVA grounds. Groundbreaking for U-Hall was in 1965 and it was host to athletic and performance events until 2006, though with notoriously poor acoustics. U-Hall's architectural design utilizes a pre-tensioned torsional ring, clad in red brick, which is characteristic of UVA buildings. The 8,457-seat arena is slated for razing.

The second stop was the **Leander McCormick Observatory** on Observatory Hill (Mount Jefferson). At the time of dedication in 1885, the telescope in the observatory was the largest in the U.S. Currently, the observatory is used for children's and public programs. Interestingly, Leander McCormick was the brother of Cyrus McCormick of Mc-

Cormick Reaper and McCormick Harvesting Machine Co.

The third stop was the **Rotunda**, the centerpiece of the University of Virginia's original grounds, and a UNESCO World Heritage site. UVA dates in concept from 1817 with construction beginning in 1819. The Rotunda was initially constructed in 1822–1826. Thomas Jefferson founded the University and held the idea of the University as a place where teachers and learners could live in community—the Academical Village. He put this concept into practice by placing the Rotunda at the center of the Lawn, which was bordered on each side by student rooms, interspaced by a series of five two-story Pavilions, originally occupied by professors. Nearly all of the original buildings on the Lawn remain in use. We were met by Steve Thompson, who has conducted archeological exploration of UVA's water supply and sewage systems. The multiple systems date to 1817, with the most recent major revision to the reservoir in 2012–2014 to improve dam safety and reservoir capacity. The Rotunda sustained a major fire on Oct. 27, 1895 as a result of faulty wiring in an annex. The Rotunda was repaired after the fire with further restoration in 1970 and another in 2015, and remains actively used by UVA.

The fourth and last stop of the day was the **Crozet Tunnel**, also known as the Blue Ridge Tunnel, at Afton, Va., about 25 mi. west of Charlottesville. The railroad tunnel was constructed in 1849–1859 under the direction of Claudius Crozet, chief engineer. At 4,273 ft. in length, it was the longest tunnel in North America at the time of opening on Apr. 13, 1858. The tunnel was built with hand labor and black blasting powder. Its average advance was 26.5 ft. per month through Catoctin greenstone, a notably hard rock. Construction was accomplished without vertical shafts. The Appalachian Trail passes over the tunnel.

The 1850s tunnel was bypassed in 1944 by a parallel

The *SIA Newsletter* is published quarterly by the Society for Industrial Archeology. It is sent to SIA members, who also receive the Society's journal, *IA*, published bi-annually. The SIA through its publications, conferences, tours, and projects encourages the study, interpretation, and preservation of historically significant industrial sites, structures, artifacts, and technology. By providing a forum for the discussion and exchange of information, the Society advances an awareness and appreciation of the value of preserving our industrial heritage. Annual membership: individual \$50; couple \$55; full-time student \$20; institutional \$75; contributing \$100; sustaining \$150; corporate \$500. For members outside of North America, add \$10 surface-mailing fee. Send check or money order payable in U.S. funds to the Society for Industrial Archeology to SIA-HQ, Dept. of Social Sciences, Michigan Technological University, 1400 Townsend Drive, Houghton, MI 49931-1295; (906) 487-1889; e-mail: [sia@siahq.org](mailto:sia@siahq.org); website: [www.sia-web.org](http://www.sia-web.org).

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The *SIA Newsletter* welcomes material and correspondence from members, especially in the form of copy already digested and written! The usefulness and timeliness of the newsletter depends on you, the reader, as an important source of information and opinion.

**TO CONTACT THE EDITOR:** Marni Blake Walter, Editor, SIA Newsletter, 11 Esty Rd., Westmoreland, NH 03467; [sianeditor@siahq.org](mailto:sianeditor@siahq.org).



Patrick Harshbarger

*The Richmond Historic Waterfront tour group is posing on the T. Tyler Potterfield Memorial Bridge with the C&O Viaduct in the background. This is a recently completed pedestrian bridge that is built on the piers of a concrete dam that once regulated the flow into a hydroelectric power canal.*





McCormick Observatory, UVA (heavily distorted by intent).



Archeology at Fort Monroe.

tunnel at a slightly lower elevation for the Chesapeake & Ohio Ry. The 1944 tunnel continues in use including by the Amtrak 50 and 51 trains (The Cardinal). Efforts are under way by a regional public-private partnership to reopen the Crozet Tunnel to pedestrian and bicycle traffic. The SIA tour approached the east portal but did not enter the tunnel because of water from the recent heavy rains.

Further information about the Crozet Tunnel including a related news article, links to the Claudius Crozet Blue Ridge Tunnel Foundation, and movies of a portion of the interior of the tunnel and the east end of the tunnel at the time of the SIA visit can be accessed at [www.pointech.com/SIA/Richmond2018](http://www.pointech.com/SIA/Richmond2018). Thanks to Mark Brown (SIA) for images from the tour and to John Mandell (SIA) for hosting the links and movies.

Another Thursday option was a walking tour of **Downtown Richmond's Historic Waterfront**. About 25 attendees assembled in the lobby of the Omni Richmond Hotel, where they were met by Tony Opperman, the Cultural Resource Manager at the Va. Dept. of Transportation (VDOT) and participating in his first SIA conference. Opperman's detailed knowledge of Richmond history became immediately apparent as he led the group into the center of what had been the city's early industrial area. He explained that many of Richmond's industries were consumed in the fire of Apr. 2, 1865, when retreating Confederate troops ignited warehouses as Grant's Union army advanced on the city. The fire quickly spread out of control and destroyed a substantial part of downtown Richmond. Post-Civil War industries were built in the area, but most of them faded away by the 1960s.

Due to the heat and humidity, the planned 3.5-mi. walk was reduced to 2.9 mi. Highlights included views and detailed descriptions by Opperman of the **Tidewater Locks of the James River & Kanawha Canal**, the **Haxall Canal**, and the **Tredegar Iron Works**. The group then crossed over the **T. Tyler Potterfield Pedestrian Bridge**, an adaptive reuse project built atop a 20th-c. mechanical dam. Here we viewed the Falls of the James River and remnant piers of the

Civil War-era **Richmond & Petersburg RR Bridge**. On the South Side of the James, a rather extreme example of historic artifacts being transformed into recreational destinations came into view: a large abutment of the railroad bridge is now a "climbing wall" and observation viewpoint. The group followed the south bank of the James, along remains of the Manchester Canal, to the 1.9-mi. mark of the walk, where our tour guide had left his car parked. He opened the hatchback to reveal a large ice chest full of cold bottles of water for the thirsty hikers!

The group re-crossed the river on the sidewalk of the 1913 Mayo Bridge, which retains its original decorative concrete parapets and light fixtures. The three-hour tour concluded in the welcome air conditioning of the Omni Richmond lobby, where participants thanked our excellent tour guide.

A third Thursday tour was an insider's view of treasures from the collections of the **Library of Virginia**. SIA members were treated to a behind-the-scenes tour led by John Metz, Deputy of Collections and Programs, and Gregg Kimball, Director of Publications and Educational Services (Gregg later presented a history of Richmond during Thursday's opening reception).

The Library was located in the State Capitol when established in 1823 and moved to its current, fourth location 21 years ago in 1997. The Library manages numerous federal, state, and local grant programs and supports 120 administrative offices of the Commonwealth. To assist in preservation, it has the largest blast freezer in the area. The Library holds 97 million documents and houses the most comprehensive collection of materials on Virginia government, history, and culture available anywhere.

Collections include company holdings, production records, and labor journals from area manufacturers, including C&O Ry. and Tredegar Iron Works, which produced half of the South's cannons during the Civil War. The Library's digitized collections include one million pages from the Virginia Chronicle and 65,000 maps which can be searched at <http://virginiamemory.com/>.

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On Friday, June 1, four tours followed itineraries that explored various areas and industries in and around Richmond.

Those lucky enough to book the sold-out *Machine and Foundry Work Tour* were treated to a well-planned overview of Richmond's iron, steel, and tobacco industries. Gregg Kimball proved a knowledgeable guide. Our first stop was **Strickland Machine Co.**, incorporated in 1901 to provide general machine and foundry work for the businesses of Tobacco Row. Strickland has long since shed foundry work to concentrate on precision machining and fabrication, primarily serving the military, the railroads, and the city of Richmond. Today it employs a dozen skilled machinists who operate machines ranging from World War II vintage to the latest programmable Computer Numeric Control (CNC) type. The company is currently prototyping an experimental rail gun for the military. One plant manager offered this perceptive insight: "Every machinist here, and every machine, has a personality, and we allocate [work] accordingly."

Leaving Strickland, we traveled through historic **Shockoe Bottom** to view the cluster of handsome multistory brick buildings collectively known as **Tobacco Row**. The 1730 Warehouse Act designated the Falls of the James River as one of the locations where the colony's inspectors graded tobacco. Numerous tobacco companies and factories sprang up in the 19th century, making Richmond one of the largest tobacco producers in the world by the 1840s. Tobacco Row today preserves several antebellum factories where slave labor produced plug chewing tobacco, as well as large storage warehouses and factories of later vintage, many now transformed into high-end residential lofts.

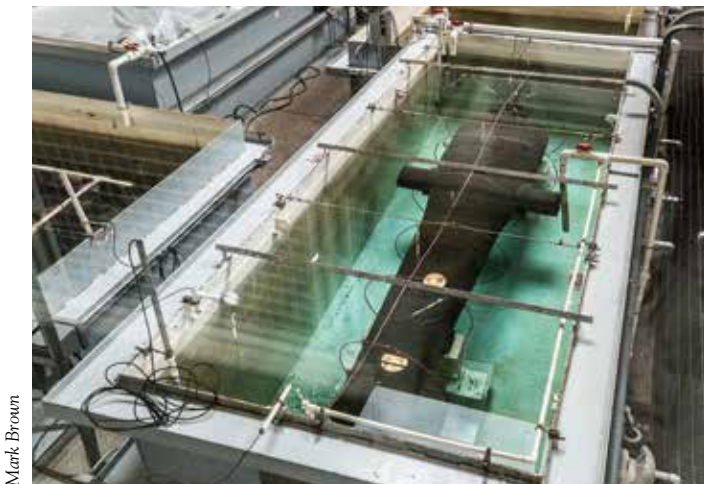
Our second stop of the day had those who love hot metal enthralled. At the **O.K. Foundry**, we watched from only feet away as molten iron, which had been melted to an average temperature of 2730°F, was transferred from an electric induction furnace into a pouring ladle. The ladle was then handed off to a veteran foundryman who, with consummate

skill, distributed the fiery liquid into a succession of green-sand molds on a roller-conveyor. As the process was repeated—and repeated—we stood transfixed, reluctant to move along. Later, we watched as the roller-conveyor dumped the mold with its cast-iron contents onto the foundry floor, thereby liberating the partially cooled but still flaming item. "It's a pretty thing," our foundry guide murmured appreciatively. We could only agree. O.K. Foundry, established in 1918, makes industrial and architectural castings for clients all over the country. That day, it was casting hand railings for the New York City subway system.

Following lunch enjoyed under a large shade tree, we were off to South Richmond to tour the enormous (2 MM sq. ft.) manufacturing plant of **Philip Morris USA (PMUSA)**, which supplies the entire domestic market. Operating 24/7 with a blue-collar force of 500 per shift, the plant's automated high-speed production machines (made by Germany's Hauni) produce 600 million cigarettes (30 million packs) a day. No samples were offered, but employees who smoke may help themselves to one free pack for their personal use each day. Marlboro is far and away PMUSA's leading brand.

We ended the day at **Tredegar Iron Works**, where Nathan Vernon Madison, author of *Tredegar Iron Works: Richmond's Foundry on the James* (History Pr., 2015), provided an introduction to the site's long and rich history. Tredegar began in 1837 with the merger of the Virginia Foundry Co., located on the banks of the James River, with the newly constructed Tredegar Forge and Rolling Mills. (The company took its name from the hometown of its Welsh superintendent.) By 1857, Tredegar had produced 60 locomotives in its three-story engine shop. During the Civil War, Tredegar covered nearly five acres. Black and white, free and enslaved laborers fulfilled the Confederacy's demand for artillery, ammunition, and armor plating. Tredegar escaped destruction at war's end and during Reconstruction busied itself with rebuilding the railroads. It would continue sporadic production until 1957.

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*Cannon from the USS Monitor under conservation.*



*The replica overshot waterwheel at the Tredegar Iron Works.*





# Fredric Quivik

## 2018 General Tools Award Recipient

*The following citation was read at the 2018 Annual Business Meeting in Richmond, Va., by Jet Lowe, chair of the General Tools Award committee.*

The General Tools Award was established in 1992 through the generosity of Gerald Weinstein [SIA], chairman emeritus of the board of General Tools Mfg., Inc., of New York City, and the Abraham and Lillian Rosenberg Foundation. The Rosenbergs founded General Hardware, the predecessor to General Tools. The award consists of an engraved sculpture ("The Plumb Bob") and a cash prize.

The recipient of the award is determined by the members of the General Tools Award committee, appointed by the President of the SIA, who serve three-year overlapping terms. Jet Lowe, the 2018 chair of the committee, is completing his third and final year of service, to be followed by Duncan Hay and Patrick Harshbarger.

The General Tools Award is the highest honor that the SIA can bestow. The award recognizes individuals who have given sustained, distinguished service to the cause of industrial archeology. Criteria for selection are as follows: (1) The recipient must have given noteworthy, beyond-the-call-of-duty service, over an extended period of time, to the cause of industrial archeology. (2) The type of service for which the recipient is recognized is unspecified, but must be for other than academic publication. (3) It is desirable but not required that the recipient be, or previously have been, a member of the SIA. (4) The award may be made only to living individuals.

Our nominee for the General Tools Award this year has been an officer, editor, tour organizer, and contributor to the SIA in so many ways that this award seems long overdue. He has organized several fall tours, including one to China, he has written and edited many articles and histories that have appeared in our journals, and he may have succeeded in altering how we think of our field of industrial archeology. His rigorous background in environmental and industrial history enabled him to become an expert witness for the Department of Justice in sorting through the legal complexities and liability issues surrounding mining and smelting properties. This in turn has expanded the way we all might think about how the analytical work of industrial archeologists can assist in resolving complex legal issues resulting from industrial and mining activities.

Whether creating a Fall Tour such as he did in Butte, Mont., or another one of Eastern Montana that included mixed missile silos and a mermaid bar, Fred Quivik has enlightened his fellow colleagues with his deep knowledge and understanding of a site. He brings his multiple perspectives of social, environmental, and technological history together and shows how each affects the others.



Maryellen Russo

***Fred Quivik, 2018 Recipient of the General Tools Award (left), with committee chair Jet Lowe at the SIA Annual Business Meeting in Richmond, Va.***

Several of my experiences working with Fred have helped me set a bar for what it takes to get a job done. I am not sure of the order in which these projects occurred, but I will say the first bar was set working with Fred photographing the head frames of Butte in January of 1979 or 1980. I guess that for Butte, -8°F was not as cold as it gets, but that seemed to be the limit at which the shutters of my camera would perform. It certainly set a standard for the cold I could endure while in the field. Later, in the spring of 1979, we drove 4,000 mi. in two weeks as we photographed some 20 bridges in Montana.

Sometimes I would sleep in the back of the wagon, and Fred would wake me up when we arrived at a bridge somewhere in the middle of the state. In between bridges, Fred would enlighten me on the engineering expertise of O.E. Peppard or the unique engineering features of James Hill's Milwaukee Road railroad right-of-way. While photographing one of these railroad bridges, we got caught in the middle of the span with a freight train speeding towards us at 80 mph. There was not enough time to get off the bridge; a glacial river flowed 90 ft. below us should we have jumped, but fortunately and thanks to OSHA, there were platforms one could stand on, allowing mere feet between us as the train blurred by. Both projects

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# C&NW Locomotive No. 175 Moved for Restoration

A bit of industrial archeology news took place across the canal from the SIA headquarters at Houghton in June.

Chicago & Northwestern steam locomotive No. 175 was moved from Ripley, Mich., for restoration at the Steam Railroading Institute (SRI) of Owosso, Mich.

The 1907 4-6-0 had long been parked outside the historic Quincy Smelter, having been moved in 1960 to the Keeweenaw Peninsula for a tourist-railroad venture that never happened. The engine and tender were stored in dismantled condition, and moved in four oversize truckloads across the Mackinac Bridge. Several truckloads of loose parts were collected from various sites and moved to SRI's shop at Owosso.

The SRI will restore No. 175 to operation, to join Pere Marquette 2-8-4 No. 1225 in excursion service in mid-Michigan, and demonstrating steam power to future generations. The Institute is waiting for determination that No. 175 is eligible for the National Register of Historic Places, which may qualify it for a grant for much of the restoration cost. SRI's revenues and a capital campaign will supply the rest of the cost over the next few years.

No. 175 is one of three survivors of the C&NW's R-1 class of ten-wheelers, which numbered 325 engines; others exist at Denver's Forney Museum and under overhaul at the Mid-Continent Railway Museum at North Freedom, Wis. The No. 175 is the only one of the three from the small sub-class of R-1's equipped with Walschaerts valve gear and piston

valves. These locomotives were used in freight and passenger service on the C&NW's branch lines across the upper Midwest. The last use of the No. 175 was to commemorate the end of steam power on the C&NW in 1958.

*Aarne H. Frobom*



*Lifting the locomotive frame and running gear.*



*Unloading the boiler at SRI in Owosso.*



*Unloading the frame and running gear at SRI in Owosso.*



*The boiler loaded on the truck, in front of the Quincy smelter.*

Scott Shields photos



# Call For Papers

## SIA 48th Annual Conference, Chicago, Illinois

The Society for Industrial Archeology invites proposals for presentations and poster displays at the 48th Annual Conference in Chicago, Ill., June 6–9, 2019. The presentation sessions will be held at the conference hotel, the Hyatt Regency McCormick Place, on Sat., June 8, 2019.

We invite presentations on all topics related to industrial archeology, history of technology, social change related to industry, and historic industrial structures and bridges. Papers about regional industries and transportation in Chicagoland and the Midwest are particularly encouraged. Proposals on historic bridge-related topics will be considered for inclusion in the 26th Historic Bridge Symposium. We are also encouraging submissions about projects related to and perspectives on the Historic American Engineering Record (HAER), which is celebrating its 50th-year anniversary in 2019. Poster displays are also encouraged, and can be on works in progress or finished projects. All presentations and poster displays should offer both interpretation and synthesis of data.

**Deadline for proposals is January 31, 2019.**

<http://www.sia-web.org/sia-48th-annual-conference/>

**Presentation Formats:** Proposals may be for individual presentations 20 minutes in length, a group of three or four presentations on a common theme filling a 90-minute session, or a 90-minute panel discussion with 2–5 discussants (a formal moderator is optional, but encouraged). SIA will provide computers, data projectors, screens, microphones, and speakers as needed in each presentation room. Posters will be on display all day Saturday with a dedicated time for poster presenters to be present at their poster for discussion.

**Proposal Formats:** Proposals should be submitted online

unless special arrangements have been made. Each proposal must include:

1. The presentation title (you will indicate the type of presentation—single paper, session proposal, or poster—on the submission form)
2. A 300-word abstract that outlines the scope, findings, and conclusions of the presentation
3. Contact information including name, affiliation, email address, mailing address, and telephone number for each presenter
4. A brief biographical statement of 150 words for each presenter
5. The software (incl. version) used to create your presentation and any additional audio-visual requests beyond the standard equipment listed above.

For 90-minute themed sessions or panel discussions, the organizer should submit a title and a brief description of the theme, along with all above information together as a group as prompted on the online submission form. If any of these items is missing, the proposal cannot be considered. Note that the above word counts apply separately to each presenter in a group. Note that all speakers are expected to pay the registration fee (for either the full conference or one-day rate).

To submit your proposal and for further information, go to the online form at <http://www.sia-web.org/sia-48th-annual-conference/>.

For questions please contact Saul Tannenbaum, SIA Presentations Committee Chair, [saul@tannenbaum.org](mailto:saul@tannenbaum.org).

## SIA Presidents Visit Eric DeLony

There was a unique SIA reunion in June at the home of Rieyn DeLony and her family in Catonsville, Md. Cydney Millstein flew in from Kansas City to see Eric DeLony, who is suffering from a neurodegenerative disease of the Alzheimer type with Parkinson's. She was joined by Christopher Marston, Robert Vogel, and Helena Wright. Eric's longtime colleague and family friend, Chester Liebs (now living in Portland, Or.), was a surprise guest.

Any SIA members who would like to send well wishes to Eric may send a card or email to his daughter: Rieyn DeLony, 100 Montrose Ave., Catonsville, MD 21228. [rieyn.delony@maryland.gov](mailto:rieyn.delony@maryland.gov)

*A gathering of four former and current SIA presidents (left to right): Christopher Marston (2018–present), Chester Liebs (1974–75), Helena Wright (1984–86), and Robert Vogel (1981–82) surround former Chief of HAER Eric DeLony.*



Cydney Millstein

## Fredric Quivik—2018 Vogel Prize Recipient



Maryellen Russo

***Fred Quivik receives the 2018 Vogel Prize at the Annual Business Meeting held in Richmond, Va.***

*Presented by Arron Kotlensky of the Vogel Prize committee, at the 2018 Annual Business Meeting, Richmond, Va.*

Each year the SIA recognizes outstanding scholarship in the field of industrial archeology with the Robert M. Vogel Prize. Named for SIA co-founding and distinguished member Robert Vogel, the award honors the author of an outstanding article that appeared in the journal *IA* within the past three years. The prize consists of a cash award and a wooden foundry pattern bearing a plaque engraved with the recipient's name. Articles selected must have a clearly stated thesis and well-constructed narrative. Analysis of material culture and high-quality illustrations that support the thesis and conclusions are also important measures of scholarship worthy of the prize.

This year's winner of the Vogel Prize draws our attention to the expanded ecological footprint that industrialization ushered in. Extractive industries

like mining offer an excellent case in point where, measure for measure, waste has essentially always outweighed and out-produced the material actually sought after. The progressive exploitation of poorer ores at increased economies of scale magnified this ratio of product to waste dramatically. The ramifications of these economic calculations have continued well past the lifespan of industrial operations, meaning that many present and former mining communities now wrestle with the consequences of living among modified and compromised landscapes. Fredric Quivik is no stranger to researching the environmental issues that are inextricably part of mining's legacy, having authored several articles about industrial landscapes. In "Nuisance, Source of Wealth, or Potentially Practical Material: Visions of Tailings in Idaho's Coeur d'Alene Mining District, 1888–2001," which appeared in the Vol. 39 double issue, Quivik provides a nuanced study into mining's voluminous and undesirable byproducts. His investigation into the practices and historical perceptions of mill tailings reveals how views about industrial waste were always contested, although at times from standpoints different than those of today. Historically, the pre-eminent concern rested upon the volume of waste material being generated more than its chemical character.

Quivik's study of Idaho's Coeur d'Alene district documents how the problem of where to put waste gave rise to several solutions, ranging from attempts to impound tailings to purchasing compromised watersheds outright and then to the inventive technique of using dynamite to dislodge the material from streams. Inarguably, the most novel solution involved putting this troublesome material to practical and profitable use. Quivik's keen analysis of documentary, photographic, and material evidence reveals how tailings became worked into the fabric of the built environment. The town of Wallace spread tailings across its streets, and entrepreneurs used tailings as aggregate in concrete blocks for constructing commercial and institutional structures, including the county courthouse. Mining waste, in this regard, symbolically and literally laid the foundations on which legal disputes involving the mining industry came to take place. Quivik's article is an important reminder for us to consider the wider, ongoing, and altogether more complicated ecological signatures of industrialization.



# Minutes of the SIA's 47th Annual Business Meeting

## June 2, 2018

**Call to Order.** President Maryellen Russo called the Annual Business Meeting to order at 12:45 pm (ET) in the Ballroom of the Omni Richmond Hotel in Richmond, Va.

**President's Report.** President Russo welcomed everyone, including those attending for the first time, and Pat Malone, who has attended every SIA Annual Conference. She noted that the SIA's first Annual Conference was held at the Cooper Union in New York City in April 1972, making this our 47th.

President Russo noted that after last year's many transitions, this year the SIA had another change: former Events Coordinator Julie Blair resigned last summer. While we were without an events coordinator, Christopher Marston (SIA's current Vice President) volunteered his time and became the interim events coordinator, free of charge to the Society. He began planning this conference in Richmond and coordinating with the folks in Dayton, Ohio for this year's upcoming Fall Tour, and he began researching possibilities for future events, including the 2019 Annual Conference. Many, many thanks to Christopher for helping the SIA in a really big way for several months. In late Nov. 2017, we hired Courtney Murtaugh, a professional event coordinator.

**Recognition of Conference Organizers and Supporters.** Christopher Marston thanked the members of the 2018 Richmond planning committee: Gregg Kimball, Library of Va.; Nathan Madison, Historic Tredegar; Arron Kotlensky; Ann L. Miller, Va. Transportation Research Council; Tony Opperman, Va. Dept. of Transportation; Jesse Harris and Joe Costello, Friends of Pump House; and Bill Trout, Va. Canals & Navigation Society.

Vice President Marston also thanked the Paper Sessions Committee: Paul White, Chair; Mark Brown; Christopher Marston; and Steven Walton. Finally, he thanked Daniel Schneider for his help on registration and publications, and new SIA Events Coordinator Courtney Murtaugh.

**Secretary's Report.** Secretary James Bouchard stated that minutes of the previous year's Annual Business Meeting were published in *SIAN* Vol. 46, No. 3 (Summer 2017). He asked for amendments or corrections; none were forthcoming. President Russo called for a motion to approve the 2017 Annual Business Meeting minutes as published. Fred Quivik so moved, Saul Tannenbaum seconded the motion, and it passed unanimously.

**Treasurer's Report.** Treasurer Nanci Batchelor read her report: "The following report is for the year that ended Dec. 31, 2017. The Society maintains its books and records on a cash basis and a calendar year basis for tax and reporting

purposes. SIA is classified as tax-exempt under the IRS Code 501(c) (3) as an educational organization, and we file a Form 990 tax return yearly.

We began 2017 with a total fund balance of \$220,005. Cash receipts for the year totaled \$70,768. The majority of our annual income comes from membership dues. In 2017, the total dues received were \$52,293. The remaining balance is made up of interest income, contributions to the general and restricted funds, publication sales, and excess proceeds from tours and conferences.

Total expenses for the year were \$56,018. The production costs of our publications, the newsletter, and the journal combined for a total of \$13,480. \$22,408 went towards labor; postage was \$4,325; and insurance, prizes, awards, and scholarships were \$6,166. Office overhead and a few miscellaneous items made up the balance.

The Society closed 2017 with excess revenue over expenses of \$14,751. The total fund balance was \$238,140, of which \$52,020 is in restricted funds. Through March 2018, the Society has had a total of \$58,110 in cash receipts and has spent \$21,402."

**Headquarters Report.** Daniel Schneider delivered the membership report. Current dues-paid membership stands at 883, which is below the membership total of 906 from the same time last year. There are 185 people who were members in 2017 who have not yet renewed for 2018. Since Jan. 1, 2018, 42 new members have joined the SIA.

New promotional materials have been developed and printed for distribution to encourage new members to join. A new rack card will be sent out to industrial museums and other heritage sites, and a square information card is available for distribution. Members are encouraged to submit suggestions for places to send the rack cards and also to pick up square cards and distribute them to people who may be interested in joining.

Headquarters needs help with improving the SIA's social media presence. Members are invited to submit photographs of IA sites, machinery, tours and activities, archeological digs and documentation, and other items of IA interest to headquarters via email. A caption or short write-up (200–300 words) should accompany the photo.

Access to all past articles from *IA: The Journal of the Society for Industrial Archeology* via *JSTOR.org* has been enabled for all current SIA members who have an email address on file.

**Executive Secretary's Report.** Executive Secretary Steven Walton reported: As resolved by the membership committee at the last board meeting in 2017, we are pursuing ad exchanges with about a dozen other journals. The idea

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is to offer them an ad for their society in either *IA* or *SIAN* in return for placing an ad for the *SIA* in their journal or newsletter. We will be approaching them over the summer, and you may see those ads in our publications soon; if so, you know that our ad is running in theirs.

You will have seen the online preliminary survey that was mentioned in the spring *SIAN* as well as an email sent to every member for whom we have an email address. At this time there have only been about 180 responses, but we will send a reminder email right after the conference. We will close the survey on July 1. A preliminary set of results was crunched last night in some hurry (we have had some communication problems with the professor in the Michigan Tech Business School who is administering the survey, but he is doing this *pro bono*) and is available on the book display table. Some initial observations are that the membership is quite strongly bimodal between avocational and professional members and that our original classification of field of employment or study was not broad enough (~50% put 'other'). The vast majority of respondents are somewhat or extremely satisfied, although it is worth noting that a very small number are extremely or somewhat dissatisfied, and it behooves us to find out why (since this survey was anonymous, we do not know who they are, but we hope to tease out these issues with the full survey to be conducted by the marketing students in the fall). We also see (again, so far, with <20% of membership reporting) that about 60% of *SIA* members are also members of a local *SIA* chapter, and a similar 60% of members have attended a tour or conference (and I would note that over half of those have attended 4 or more, suggesting that once people attend one, they want to attend another). The other text-entry, free-form responses to date are too complex to summarize, but look for summaries of the full survey on the *SIA* website and in the *SIAN* later in the summer/fall.

One other thing worth noting that has been discussed at HQ is the amount of resources put into the annual conference and the fall tours when they attract only about 20% and <10% of our membership each time. We do not wish to step away from them, but we would like to make sure we are engaging the majority of the membership whenever possible.

**IA Journal.** Editor Steven Walton reported that Fred Quivik's final issue, Vol. 41, Nos. 1–2 on archeology in Pennsylvania, finally saw press in early 2018, and thanked him for the six years of editing that he did and for his assistance in the transition. The same proofreader and layout person will continue, so the transition should be smooth. He reported that production of the next issues is moving forward, with one single issue just about to come out, another single issue scheduled for the fall that is about half ready now, and two special issues in various stages of development. Vol. 42, No. 1 with four diverse articles is now going to the layout stage. Vol. 42, No. 2 is a bit over half ready in terms of articles in and revised, and it should come together to layout stage by Sept. or Oct. this year.

Following that, with all the articles already in, is a double issue on "Intangibles in *IA*" (working title), whose articles look at the non-physical aspects of *IA*, both sites and processes. That issue is expected to go to press in winter 2018–19. Beyond that, an issue idea that is gaining some good traction is one on "Atomic *IA*" on sites and technologies related to the nuclear and space age.

Beyond that, however, I need to inform the assembled meeting that there is very little to nothing further in the hopper. In order to continue producing the journal, we need material, so I send out a plea to you to write, to encourage others to write, and to let me know of viable papers or topics and who to approach to generate more material for the journal. On another note, we are looking into the possibilities of printing future journals with color photos (the digital versions on JSTOR will henceforth have them, although for now we are printing in black and white) and are open to the possibility of running ads for *IA* books (that is, publishers' ads) in the back of *IA*, although that is a low priority and we would welcome feedback on the idea. I would simply note that this is a common practice in most academic journals and that the content of the ads would need to be relevant to our readership for us to accept them.

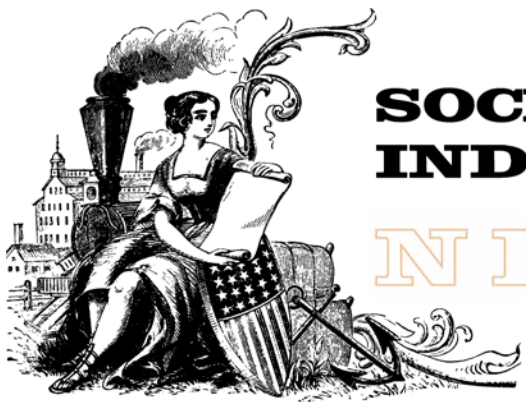
In other news, I am pleased to report that our relationship with JSTOR ([www.jstor.org](http://www.jstor.org)) is strong and getting better. At the start of the year, we elected to pay \$300 per annum to give all members access to all the back issues through a personal login. HQ sends the membership list to JSTOR at the start of the calendar year and further updates for late renewals quarterly, and JSTOR handles sending out the login information. This is a cost to the society, but it is a good one in that the other side of the relationship has generated income to *SIA* of \$3,400 in the 2017 calendar year from non-members downloading our articles, for which they pay a fee.

I am also pleased to report that *IA* will soon be indexed both in the subscription-based History of Science, Technology, and Medicine Database, administered by EBSCO ([www.ebsco.com/products/research-databases/history-science-technology-and-medicine](http://www.ebsco.com/products/research-databases/history-science-technology-and-medicine)) and in the open-access IsisCB – Bibliographic Resources in the History of Science (<http://isiscb.org>).

**SIA Newsletter.** President Russo read a report from *SIAN* Editor Marni Blake Walter: "Since last year's business meeting, the *SIAN* has been published four times. The current issue (Spring 2018) is nearing completion. I extend heartfelt thanks to everyone who readily volunteered to write about and photograph the events at this conference. Special thanks also to the contributors who regularly assist with editorial tasks and columns like Publications of Interest and *IA* on the Web, as well as Arlene Collins and Daniel Schneider, who handle layout, printing, and mailing of the newsletter. To all members, please don't be shy about sending links, notes, or other items of *IA* interest, and feel free to contact me with any ideas for articles that you'd like to discuss.

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# SOCIETY FOR INDUSTRIAL ARCHEOLOGY NEWSLETTER

## PUBLICATIONS OF INTEREST

Vol. 47, No. 3

Summer 2018

COMPILED BY

Mary Habstritt, New York, N.Y., Patrick Harshbarger, Wilmington, Del., and Marni Blake Walter, SIAN editor, Westmoreland, N.H.

### GENERAL INTEREST

- ◆ **Engineering Heritage Australia Magazine**, Vol. 2, No. 8 (May 2018), <https://www.engineersaustralia.org.au/Communities-And-Groups/Special-Interest-Groups/Engineering-Heritage-Australia/Publications>. This issue covers the 19th Australasian Engineering Heritage Conference, held in Mildura, Victoria, Oct. 2017. The theme of the conference was "Putting Water to Work," from the steam power that opened Australia's inland waterways to navigation in the 19th c. to nation-building irrigation and water supply schemes. Articles are based on the conference presentations, including aboriginal-built fish traps in the Barwon-Darling catchment; the significance of windmills; punts, pontoons, and ferries on the Murray-Darling river system; the reinforced-concrete Barwon Sewer Aqueduct (1913); and more.
- ◆ **IA News**, No. 185 (Summer 2018), includes Jonathan Lloyd, *European Route of Industrial Heritage, A Network for Cooperation and Partnership* (recognizing nearly two decades of the partnership, which now includes nearly 250 members); Chris Lester, *Grimsby Ice Factory—An Endangered Site—Official* (identified as one of the Seven Most Endangered Sites in Europe, the factory was established in 1901 to provide ice for Grimsby, U.K.'s fish industry); and many brief reports on British IA sites including Sudbury Gas Works, Staffordshire 'bobbin' milepost, Ferry Lane pumping station (near London), and Bowbridge Lock on the Thames & Severn Canal.
- ◆ David Starbuck [SIA], ed. **The New Hampshire Archeologist**, Vol. 57, No. 1 (2017) is a special issue devoted to IA topics. Includes James L. Garvin [SIA], *The Milford Suspension Footbridge: A Rare Survivor*; Kristen M. Powell, *New Hampshire's Merrimack River Locks and Canals: Historical and Archeological Research on Waterfall Development*; and Dennis E. Howe [SIA], *The Sewall's Falls Recreational Park: A Place of Archeological and Historical Research* (the park includes hydroelectric power plants from ca. 1893–1905).
- ◆ **TICCIH Bulletin 79** (1st Quarter, 2018) includes Moulshri Joshi, *The Industrial Heritage Inventory of India*; G.J.O. Wallis, *Ethical Conservation*; David Perrett, *Henry Ford's 1928 IA Holiday, Part 2*; Zachary Liollo [SIA], *Iron Heritage Meets Iron Art*; Bengt Norling, *Reviving the Lancashire Iron Process*; Volodymyr Kazakov and Viktoriia Patsiuk, *Industrial Heritage Re-Valorization*; Alain Gelly, *The Lachine Canal: A Heritage Challenge*; Monica Ferrari, *Taft Viejo Railway Workshops*; Peter Wakelin, *Blaenavon Industrial Landscape*; Piotr Gerber, *Foundation for the Protection of Silesian Industrial Heritage*; Jana Horrocks, *Sustainable Development and Industrial Heritage*; Stefan Poser, *Tourism, Technology and Heritage*; Jaime Migone, *TICCIH Congress, Santiago de Chile, 2018: Valparaíso Lifts and Funiculars*; Gràcia Dorel, *6th International Congress of Railways, History and Heritage*; TICCIH Thematic Conference on the Water Heritage; Miles Ogglethorpe, *Industrial Heritage in India, Workshop at the ICOMOS 2017 General Assembly*. Info: [www.ticcih.org](http://www.ticcih.org).
- ◆ Simon Winchester. **The Perfectionists: How Precision Engineers Created the Modern World**. Harper Collins, 2018. 416 pp. \$29.99. Examines how increasingly precise engineering facilitated mass production. Rev.: *NYT Book Review* (June 17, 2018), p. 16.

### MINES & MINING

- ◆ Gregory Crouch. **The Bonanza King**. Scribner, 2018. 466 pp. \$30. Biography of John Mackay, one of the "Bonanza Kings" of the Comstock Lode and a founder of the Commercial Cable Co. which laid a second transatlantic cable to break the monopoly of Western Union Telegraph and Jay Gould.
- ◆ Michael Virtanen. **Digging into Tahawus Mine**. *Adirondack Explorer* (June 29, 2018), [www.adirondackexplorer.org](http://www.adirondackexplorer.org). The Tahawus titanium mine, owned by National Lead and active from WWII to the 1980s, is now an aggregate quarry. It is a remnant of industry in the Adirondacks High Peaks Wilderness which once hosted hundreds of mines, most extracting iron.

### WATER TRANSPORT

- ◆ Costas Paris. **Philadelphia Shipyard Cuts Jobs**. *WSJ* (June 1, 2018), p. B2. Philly Shipyard, once a major source of naval vessels included the battleship U.S.S. *New Jersey*, has delivered more than half of Jones Act oceangoing vessels since 2003. However, due to the costs of building and operating these vessels and the limited market in which they work, U.S. shipowners are cutting back on orders.

## RAILROADS

- ◆ Philip Ashforth Coppola. **One-Track Mind: Drawing the New York Subway.** Princeton Architectural Pr., 2018. 157 pp., illus. \$24.95. Collection of Coppola's intricate line drawings of the terracotta mosaics, faience, and tile patterns of New York's subway system.
- ◆ Justin Franz. **One of the World's Largest Steam Locomotives Is About to Make a Triumphant Return.** *Atlas Obscura* (June 12, 2018), [www.atlasobscura.com/articles](http://www.atlasobscura.com/articles), search Union Pacific. Six decades after the last "Big Boy" engine (a class of some of the largest steam locomotives, built in 1940 to move heavy freights over the Rockies) was taken out of service, Union Pacific is rebuilding one of the locomotives in honor of the upcoming sesquicentennial celebration of the first Transcontinental Railroad.

## AUTOMOBILES & HIGHWAYS

- ◆ Maxwell Gordon Lay. **The Harnessing of Power: How 19th Century Transport Innovators Transformed the Way the World Operates.** Cambridge Scholars Pub., 2018. 374 pp., £64.99. The book examines how the 19th-c. transport legacy of bicycles, trains, ocean-going steamers, trucks, trams, buses, and cars arose, creating new technologies and markets. The Industrial Revolution was a key part of the process as it had strong links with transport developments. The author uses a broad, global perspective, with a British focus.
- ◆ Kevin J. Patrick, Elizabeth Mercer Roseman, and Curtis C. Roseman. **Route 6 in Pennsylvania.** Across the northern tier of the Keystone State, a history and guidebook to 400 miles of U.S. Route 6, its scenery, and its mid-20th-c. roadside attractions. Rev: *SCA Journal* (Spring 2018), p. 38.
- ◆ Stephen H. Provost. **Highway 99: The History of California's Main Street.** Craven Street Books, 2017. 270 pp.

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*With Thanks.*

\$20.95. From Calexico on the Mexican border to Yreka, the last stop before Oregon, a detailed history of the automobile road including civil engineering, motels, resorts, restaurants, and other roadside businesses and attractions. Rev.: *SCA Journal* (Spring 2018), p. 38.

- ◆ *SCA Journal*, Vol. 36, No. 1 (Spring 2018) offers its usual eclectic mix of observations and documentation of mid-20th-c. roadside architecture and attractions. Douglas Towne, *Transplanted Route 66 Diner "Welcomes" Hungry Phoenixians* reports on efforts to preserve a small mid-1930s diner manufactured by the Arthur Valentine Co. of Wichita, Kan., originally located in Williams, Az., and now in Phoenix; Chris Berger, *Fountain of Youth-Themed Cyclorama Awaits New Life in Florida* offers documentation of a Warm Mineral Springs, Fla. attraction that was built in 1959 to house colorful dioramas that depict Spanish conquistador Juan Ponce de Leon's fabled quest; Christine Rae Henry, *Getting to the Bottom of Ohio's Mysterious Blue Hole* regarding a roadside attraction near Castalia that built elaborate walkways and bridges around a series of sink holes; and Debra Jane Seltzer, *Norge Village Laundry Signs*, historical background of the Norge Laundry & Cleaning Village franchise and its backlit, ball-shaped, spinning signs.
- ◆ Debra Jane Seltzer. **Vintage Signs of America.** Amberly Pub., 2017. 96 pp. \$15. Organized by various types of signs and materials from neon to plastic, supported by numerous photographs. Rev.: *SCA Journal* (Spring 2018), pp. 36–37.

## BUILDINGS & STRUCTURES

- ◆ Neal E. Boudette. **Ford Aims to Revive a Detroit Train Station, and Itself.** *NYT* (June 17, 2018), Business pp. 1,6. Ford Motor has purchased the long-abandoned Michigan Central Station and plans to restore it as the centerpiece of a new urban campus for developing new businesses like self-driving cars.
- ◆ Jess Levenson. **Buffalo District and Partners Sign Cleveland Hulett's Agreement.** U.S. Army website (July 10, 2018), [https://www.army.mil/article/208340/buffalo\\_district\\_and\\_partners\\_sign\\_cleveland\\_hulett\\_s\\_agreement](https://www.army.mil/article/208340/buffalo_district_and_partners_sign_cleveland_hulett_s_agreement). The U.S. Army Corps of Engineers Buffalo District, Cleveland Port Authority, and several Cleveland preservation groups signed a Memorandum of Agreement (MOA) June 1, 2018, taking steps to resolve 20 years of debate over dredging the Cleveland Bulk Terminal and its impact on the Cleveland Hulett Iron Ore Unloaders ("Hulett's"). The MOA states that the groups have three years to work together and reach an agreement on what to do with the two standing Hulett's. If no agreement is reached, the Port Authority will have the right to move the Hulett's.
- ◆ Lee Rainey. **Mount Union's Welch Block.** *TT*, Vol. 30, No. 2 (Summer 2018), pp. 11–16. Standing adjacent to the East Broad Top main line at the intersection of Jefferson St. and Pennsylvania Ave. in Mount Union, Pa. was the Welch Block, built in 1903 by civic leader Allen S. Welch. Presents detailed notes, photos, and drawings about this building through the 1960s.
- ◆ Michael E. Ruane. **"No One Famous Lived Here," but the Old Stone House on the Mall Has Endured.** *Washington Post* (Aug. 29, 2018), [www.washingtonpost.com](http://www.washingtonpost.com), search on lockkeeper's house. An 1830s lockkeeper's house has been

*(continued on page 22)*



# Fulton Ave. Bridge Demolition Spurs Mitigation Projects

The Metro-North RR Fulton Ave. Bridge in Mt. Vernon, N.Y., an 1892 Berlin Iron Bridge Co. steel, Pratt through-truss bridge supported by masonry abutments, is slated for demolition, but will be recorded and remembered through two required mitigation projects.

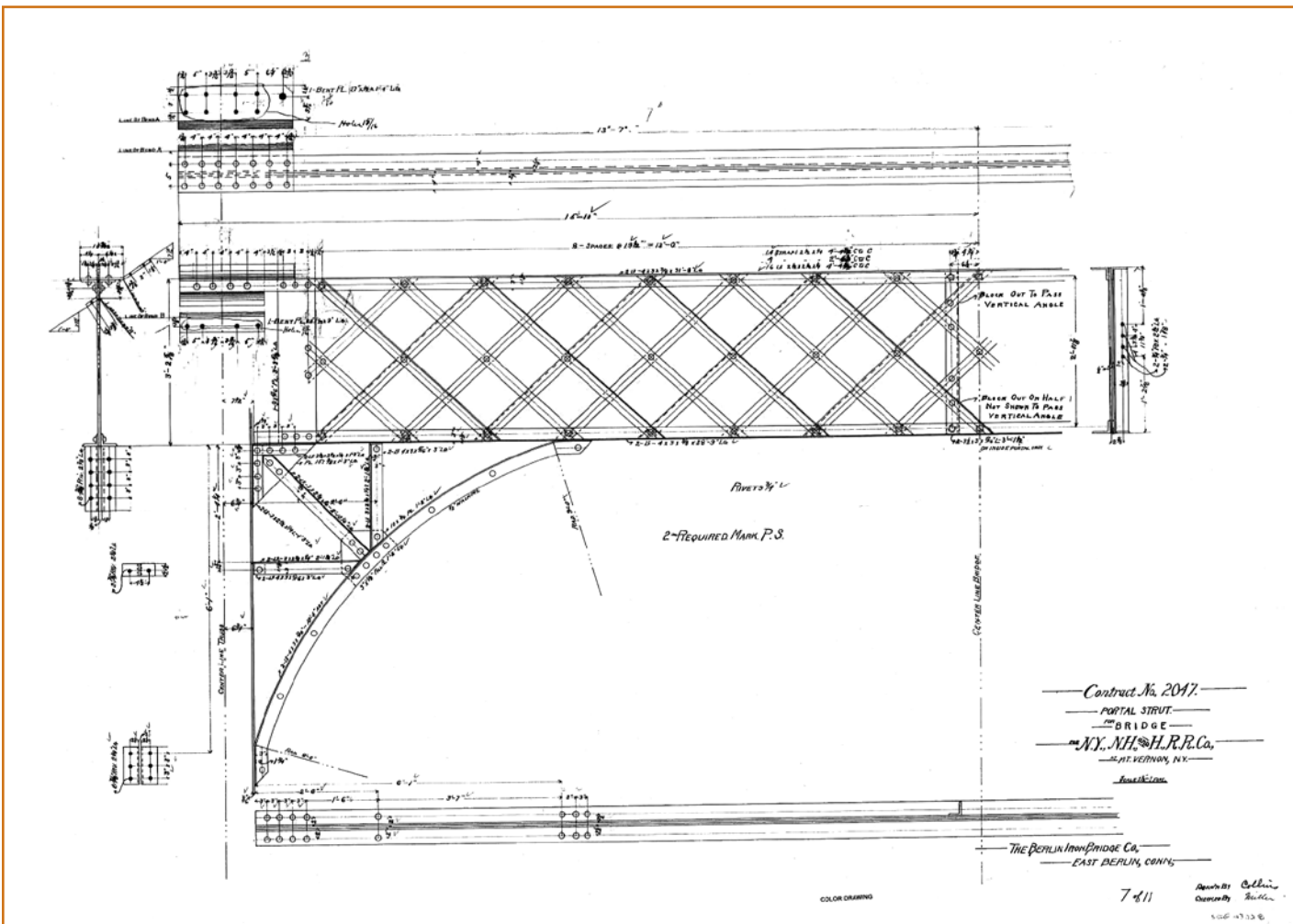
Connecticut's Berlin Iron Bridge Co. was New England's foremost designer and fabricator of iron truss bridges in the late 19th c. The company's fortunes were tied to the explosion of train travel that demanded safe passage over natural obstacles such as rivers, ponds, wetlands, and gorges. As rail lines were increasingly laid through populated areas, Berlin's truss bridges also served to alleviate non-natural obstacles. The increasing incidence of horrific and bloody accidents occurring between locomotives and the horse-drawn cart and wagon traffic led to the 1880s movement to eliminate grade crossings, particularly through town centers, where

these accidents generally occurred. Grade crossings were often eliminated in heavily trafficked, populated areas by cutting a deep narrow corridor and installing new tracks on the bottom of the created “gorge.”

The New York, New Haven and Hartford RR, known today as the Metro-North Railroad (MNR), cut a deep rail corridor through much of the bedrock of the Mt. Vernon community in Westchester County for the New Haven Line. This substantial cut, supported by massive stone retaining walls and spanned by multiple Berlin truss bridges, allowed the trains to run unimpeded by local traffic. The Fulton Ave. Bridge, a Pratt through-truss spanning the new and deep cut (Berlin Iron Bridge Co. Contract No. 2047) was completed in 1892, the same year the City of Mt. Vernon was incorporated.

Although the elimination of grade crossings for the rail-

(continued on page 14)



*Original Draw Sheet, Contract 2047, Portal Strut for Bridge, N.Y., N.H., and H.R.R. Co., Berlin Iron Bridge Co., East Berlin, Conn. Original on file at Metro-North RR Archives, New York, NY.*

## **FULTON AVE. BRIDGE** *(continued from page 13)*

road and the installation of bridges provided safe access between the north and south sides of Mt. Vernon, the deep cut was reviled by local citizens. The cut divided the citizenry both physically and politically. First, the projected 18 months of construction, mainly by Italian immigrant laborers, stretched to two years. Second, the occurrence of frequent accidents with vehicles falling into the cut caused neighbors and residents to claim that it was a safety hazard. Well into the third and fourth quarters of the 20th c., plans were proposed to cover the cut and build a new station and parking area above the railroad.

After years of service (and the subject of much neighborhood debate over more than 100 years), the Fulton Ave. Bridge is slated for demolition because of both excessive structural deterioration and the need to maintain railroad operating clearances. The bridge has an extremely low load rating, which limits vehicles to a maximum weight of three tons; any vehicles over three tons (including fire trucks, commercial delivery vehicles, municipal maintenance vehicles, sanitation trucks, etc.) are currently banned from using the bridge. The bridge cannot be repaired in-kind to modern code standards. The City of Mt. Vernon supports the upgrade as a new bridge will be able to accommodate first responder access and provide better services to the neighborhood.

The Fulton Ave. Bridge appears to be the only remaining Berlin-built Pratt through-truss bridge along the MNR New Haven Line in this Westchester County area. After a comprehensive Alternatives Analysis, the New York State Historic Preservation Office (SHPO) recognized the

significance of the Fulton Ave. Bridge and, also, concurred with MNR's safety assessment and allowed the demolition and replacement plans to move forward. SHPO imposed two mitigation tasks: Historic American Engineering Record (HAER) documentation of the bridge prior to demolition; and installation of educational panels. MNR has fully sponsored completion of both mitigations. The HAER documentation completed by Historical Perspectives, Inc., was filed with NY SHPO in 2018 (Historical Perspectives, Inc., 2018, Historic American Engineering Record: Fulton Avenue Bridge over MNR, New Haven Line milepost NH 14.07, Mount Vernon, Westchester Co., NY). Research for the HAER document relied to a great extent on prior Berlin Iron Bridge studies completed by Thomas Boothby and Bruce Clouette (2004), Victor Darnell (1979), and Lynn Drobbin (2003), as well as the Univ. of Connecticut Archives and Special Collections at the Thomas J. Dodd Research Center.

The mandated HAER package for the Fulton Ave. Bridge augments the 28 original Berlin plan sheets on file at MNR. These various sheets, including Erection Plan, Masonry Plan, Top Chord, Knee Brace and Top Struts, etc., are dated Oct. 1892. (Two plan sheets date from 1932 and two sheets date from 1947, all of which relate to general property surveys and no substantive changes in the original design.)

The bridge, officially noted at New Haven Line milepost NH 14.07, is a single span, 160-ft.-long, built-up eyebar, Pratt through-truss. The pin-connected Pratt through-truss was one of Berlin's more efficient and prominent "catalog" bridges. The Pratt patent of 1844 by Boston architect Caleb

Tod Bryant, all photos



*Fulton Ave. Bridge, view southeast showing structure of north section of east side.*



*Fulton Ave. Bridge, view south of north portal.*





**Fulton Ave. Bridge, view northwest from south side of tracks showing west elevation.**

Pratt and his son, Thomas, is identified by a simple web arrangement of diagonals in tension and verticals in compression, and inclined end posts. Prevalent through the early 20th c., Pratt trusses were initially built as a combination wood and iron truss, but were soon constructed in iron only. The Pratt type successfully survived the transition to steel (ca. 1892). The Pratt offered ease of design, fabrication, and shipment by using economical, standard, rolled-angle and channel sections, plates, bars, rods, and I-beams.

The Fulton Ave. Bridge exhibits built-up steel floor beams, stringers, and a timber deck. The transverse floor beams are hung from the bottom chords via hanger bolts. The stringers are located on top of the floor beams and support the timber deck. This type of truss has all of the primary load carrying members (vertical, horizontal, and diagonal) above the deck surface. The bridge superstructure is supported by two masonry abutments. The truss width is 30 ft. center to center of truss chords. The bridge sidewalks are supported on cantilevered steel brackets, attached to the bottom chords of the truss. The portal bracing is supported by a simple sunburst bracket. Neither the north nor south portal strut supports a portal crest, a typical Berlin element which may have been lost over time. The bridge is largely unaltered from its original state, excepting obvious modern features such as asphalt roadway paving and safety walls or barriers adjacent to the sidewalks.

After the bridge is replaced, estimated to be 2022, two educational panels will be installed on the public sidewalk level of the new span. As requested by SHPO, the interpretive text and graphics will focus on the Berlin Iron Bridge Co. history, the significance of the Fulton Ave. Bridge design, and the railroad cut through the city.

—Cece Saunders

## SITES & STRUCTURES

An online petition is now available to help “Save the Urger”: [www.preservenys.org/save-the-urger.html](http://www.preservenys.org/save-the-urger.html). As noted in the previous issue (SIAN Vol. 47, No. 2), the condition of the tugboat *Urger*, a National Register-listed flagship vessel of the Erie Canal, is threatened. The New York State Canal Corporation, under the New York Power Authority (NYPA), plan to disable and beach the tug on dry land as a static exhibit at the Lock 13 visitor center off the westbound NYS Thruway in Montgomery County, N.Y.

Tug *Urger* used to travel the canal system for school field trips and public events. The “teaching tug” has introduced thousands of school children and the general public to the role of the Erie Canal in making New York the Empire State. Other historic canal vessels are planned to be sunk as part of artificial reef creation off the coast of Long Island ([www.dec.ny.gov/index.html](http://www.dec.ny.gov/index.html)).

The Preservation League of NYS has launched a campaign to call attention to these losses and urge NYS to protect, preserve, and celebrate its Erie Canal history. Erie Canalway National Heritage Corridor is supporting this effort. For more information and resources, and to sign the online petition, see [www.preservenys.org/save-the-urger.html](http://www.preservenys.org/save-the-urger.html).

Redevelopment of the **Curtiss-Wright Hangar** at the Owens Field airport in Columbia, S.C. received a 2018 Preservation Award for Adaptive Use from Historic Columbia. Constructed in 1929, the hangar is one of a few extant examples of a Glenn Curtiss/Wright Brothers-designed hangar in the U.S. During its early years, the building hosted air shows and visits from Amelia Earhart and President Franklin D. Roosevelt. Developers retained the character-defining elements of the historic structure and integrated them into the building’s new use, including the large sliding door, exposed metal trusses, and window frames. A new roof, closely matched to the original, and new panes of glass are among the few things that were replaced. The hangar is now home to Hunter-Gatherer Brewery. The brewery takes up the entire 13,000-sq.-ft. hangar and includes a tap room, event space, an open-to-the-public brewery, and an observation deck overlooking the commuter airport.—[www.historiccolumbia.org](http://www.historiccolumbia.org). ■



Today, the National Park Service operates a visitor center in the Pattern Storage Building, while the surrounding site contains a variety of industrial artifacts which we took in at leisure until the blazing sun compelled our retreat.

*Petersburg and South Tour.* Our guide was none other than Christopher Marston, whose name you might see elsewhere in this edition, not to mention newsletters going back a few decades. We were particularly honored to have Christopher's father, Lee, among us tourists.

On the way to Petersburg, we began with a drive-by tour of the chronology of **Tobacco Row** on the edge of downtown Richmond with its numerous six-to-eight story brick factories. Below was river transportation, and above, housing for both workers and management. Today, the factories themselves largely have been transformed into upscale housing, promoted as "Manhattan-style lofts." In the 1920s, the industry outgrew Tobacco Row and moved to larger but shorter two-to-four story factories on the South Side. These were in the lower-density Manchester neighborhood across the James, and they too have largely been converted to residential lofts.

Beginning in the 1960s, the Manchester factories were overtaken by a single huge facility further south. The Philip Morris USA plant was our only process tour. My impression: today's cigarette machines are not that different than three decades ago. What enables today's machines to run much faster is a cocoon of process control. Three decades ago, the cigarette machines stood apart on the production floor, providing plenty of access for their human operators. Today, the core machine is almost subsumed by infrastructure. An assemblage of robots and conventional assembly-line equipment supplies each machine with great precision.

Lyle Browning of the **Falling Creek Ironworks Foundation** introduced us to the ruins roughly halfway between Richmond and Petersburg. The ironwork's claim of being the first blast furnace in North America is contested, with Saugus Iron Works near Boston being a prime contender. Recovering some physical evidence of production would bolster Falling Creek's claim, but limited archeological work has not recovered any slag.

At the same stop, the pontists in the group investigated the twin stone arch remains of the Falling Creek Bridge. Built in 1823 by the Manchester & Petersburg Turnpike Co., the arches were stabilized following damage from Tropical Storm Gaston in 2004.

The rest of the day was spent in **Petersburg**, whose development generally follows the path of East Coast fall line cities: first it was an outpost for trade with Native Americans, next a center of commerce for nearby tobacco plantations, then it flourished with tobacco, cotton, flour, and iron manufacturing powered by the Falls of the Appomattox. One peculiarity was a concentration of late 19th-c.–early 20th-c. luggage factories, some of which survive as apartments. Another distinction, Petersburg had the largest proportion of freed slaves in the South. This is variously attributed to edicts of local churches and employment opportunities in river transportation. However, the most immediately important distinction for our tour was that downtown Petersburg retains many 1820s–50s buildings. Our hosts were several members of the Historic Petersburg Task Force (HPTF). Dean McCrae, who co-owns the Appomattox Iron Works, showed off his complex of 19th-c. buildings and machinery, while HPTF's Chip Mann gave us a history lesson on the city and ongoing efforts to preserve it as a historic cultural

Steve Muller



*James (Jamie) O'Neil IV, great-grandson of the founder of O.K. Foundry, explains patterns and casting techniques.*



David Farrier

*Some years ago, Mike Raber (in the striped shirt) used blueprints while surveying the Tredegar Iron Works. On the Library of Virginia tour, he gets another look at the blueprints.*



tourism destination. The day was sunny, but humid even by Virginia standards, which made our final stop—a mid-19th-c. ice house—especially welcome. Today Dave McCormack operates it as a craft brewery, named Trapezium in honor of an extant 1820s house that supposedly (but falsely) is said to have no square corners.

Led by Arron Kotlensky, the *Virginia Maritime and Peninsula Tour* headed eastward on the Virginia Peninsula. The first stop was to pick up John V. Quarstein, an award-winning historian, preservationist, and author, as well as director emeritus of the USS *Monitor* Center at the Mariners' Museum in Newport News. Quarstein provided interesting and colorful details about the Virginia Peninsula as we rode to **Fort Monroe National Monument**. From atop the ramparts of the fort, tour participants could see Hampton Roads and the Chesapeake Bay, and understand why the fort was constructed almost 200 years ago to defend this strategic location. A walk through the extensive casemates within the fort led to an active archeological dig, which was described in detail to the group by a National Park Service archeologist.

Next was the **USS Monitor Center** at the **Mariners' Museum**. However, Quarstein first directed the bus driver to an interesting unscheduled stop in Newport News, where the group could see the location where the Confederate ironclad CSS *Virginia* had attacked Union ships prior to the battle with the USS *Monitor* on Mar. 9, 1862. Also in view was the aircraft carrier USS *Enterprise*, which was undergoing demolition after long service with the U.S. Navy.

Arriving at the Mariners' Museum, the group enjoyed lunch in a shaded picnic area, then entered the museum to visit the Batten Conservation Complex. Here an archeologist conducted a detailed, behind-the-scenes tour of how *Monitor*-related artifacts are preserved for display.

After driving along a section of the **Colonial Parkway**, the last stop was **Colonial National Historical Park**, which

preserves the site of the 1607 colony of James Fort and later, Jamestown. The group again had the privilege of a behind-the-scenes tour at the Jamestown archeological research center, where artifacts of the colony are assembled and preserved.

The **James River & Kanawha Canal and Pump House** tour (visited on both Friday and Sunday by different groups) started at the Omni Richmond Hotel, which was built on the site of the Great Basin for the canal. Tour leader Bill Trout discussed the historic artifacts and illustrations of the canal included in the hotel décor and outdoor landscaping. The group continued on foot through the series of restored Tidewater Connection Locks, and then boarded two boats for a

(continued on page 18)



Cupola furnace at the Appomattox Iron Works.



The red lantern was the last part of the USS Monitor seen the night it sank. It was the first object recovered from the ocean floor.

Mark Brown

Brian Gill



## ANNUAL CONFERENCE *(continued from page 17)*

water tour of the canal. We passed alongside the Triple Crossing, where three rail lines cross one above the other (sorry, no trains crossed when we went by), through the massive concrete **James River Floodwall** and into the larger canal area. The river was in flood condition after Virginia's record rainfall in May, and so was a lovely light chocolate brown, fiercely turbulent, and slightly above the banks in places. This section of the canal has a railroad on each side: Norfolk Southern low down on one side and CSX on a massive steel viaduct on the other side. The viaduct hides, to some extent, the floodwall and the former factories of Tobacco Row behind it. Both railroads are active, and we saw an Amtrak train come and go on the viaduct. Our boat tour turned around at the Norfolk Southern bascule bridge (now welded closed), which was only a few inches above the water. After leaving the boats, we boarded the bus and drove between the viaduct and Tobacco Row to **Great Shiplock Park**, where we explored the locks, which are now permanently closed. Some went on to the site of the former **Trigg Shipyard**, where, unfortunately, only parts of the foundations remain.

The bus tour continued past downtown to **Hollywood Cemetery**, a pastoral cemetery perched on a scenic bluff above the James River. Here the group enjoyed lunch near James Monroe's Tomb, aka "The Bird Cage," a Gothic Revival-style cast-iron confection cast in Philadelphia in 1859.

Next, traveling to the 1883 **Byrd Park Pump House**, the bus took a winding route through Byrd Park and some residential areas and even gave us a view of the carillon before reaching the Pump House. Here, Joe Costello and Jesse Harris of Friends of Pump House showed off the Gothic Revival-style building. Looking more like a church than an industrial building, the large gallery over the original pump room provided space for social activities in the park. Early visitors could arrive and depart by canal boat. The pumping equipment was driven by water power directly from three water

wheels. Later turbines each drove three pumps that moved water up from the canal to the reservoir in the park. There was also a turbine added to make electricity and drive some other pumps. Unfortunately, all the equipment was removed in the 1930s, with only the foundations and some pieces of piping remaining. However, the Pump House is still an impressive space, especially the main pump room. For more information about Friends of Pump House's latest preservation efforts (which was awarded an SIA Preservation Grant during the conference), see [www.friendsofpumphouse.org](http://www.friendsofpumphouse.org).

The last part of the canal tour was a walk along the canal to the beginning of the James River & Kanawha Canal. We viewed Washington's arch built in 1791 to mark the starting point of the original James River canal.

The SIA thanks all of the volunteers who helped organize and run the 47th Annual SIA Conference, and produced a companion guidebook. Special thanks to the members of the Planning Committee: SIA Vice President and Conference Chair Christopher Marston; Gregg Kimball, Library of Virginia; Nathan Madison, Historic Tredegar; Arron Kotlensky; Ann L. Miller, Va. Transportation Research Council; Tony Opperman, Va. Dept. of Transportation; Jesse Harris and Joe Costello, Friends of Pump House; and Bill Trout, Va. Canals & Navigation Society. Thanks also to the Paper Sessions Committee: Paul White (Chair), Mark Brown, Christopher Marston, and Steven Walton; new SIA Events Coordinator Courtney Murtaugh, and Daniel Schneider, our jack of all trades who designed the webpage, guidebook, and handled online registration. The SIA would especially like to express thanks and appreciation to all of the sites and facilities that opened their doors to us.

*With contributions by George Blishak, James Bouchard, Diana Bouchard, Mark Brown, David Farrier, Brian Gill, Patrick Harshbarger, Christopher Marston, Bill McNiece, Steve Muller, and Carol Poh.*



Owner Dean McRae shows off the foundry crane at the Appomattox Iron Works in Petersburg.



Tour participants examine the three-high roll train at the Tredegar Iron Works.

Thanks to all for your support and contributions during my first year as SIAN editor.”

**Tours and Conferences.** Events Coordinator Courtney Murtaugh first introduced herself (for introduction, see SIAN Vol. 47, No. 1, Winter 2018). She then provided an update on the SIA Fall Tour to Dayton, Ohio, Sept. 27–30, 2018. Registration opens in July. The conference hotel is the Crowne Plaza Dayton, 33 East Fifth St., with a room rate of \$121/night. The hotel is located downtown and is within walking distance of the reused Dayton Power & Light (DP&L) Steam Plant, site of the Thursday opening reception. It is a full-service hotel with free wi-fi, meeting rooms with executive services, and a fitness room.

Thursday’s early bird tour will include Verdin Bell Casting, Roebling Suspension Bridge, and the National Voice of America museum. The Thursday evening reception speaker will be Ed Roach, historian with the Dayton Aviation Heritage National Historical Park and author of *The Wright Company: From Invention to Industry*.

For Friday’s process tours, two groups are planned for optimal scheduling. Some aviation sites will be included in both, but the majority of sites will be unique to each.

Saturday Museum Tours will include the Mound Cold War Discovery Center and the National Museum of the USAF. The Saturday Banquet and tour will be the Staley Mill Farm and Indian Creek Distillery. A list of optional Sunday tours to do on your own will be provided.

Jacob Kaplan reported that the 2019 SIA Annual Conference will be held in Chicago, Ill., June 6–9, and the conference hotel is the Hyatt Regency McCormick Place. Jacob then mentioned a number of sites that are being solicited for tours and other conference activities.

**Membership Committee.** Mark Brown reported on behalf of the committee: I would like to thank Maryellen for appointing a stellar team to the Membership Committee. Nanci Batchelor, James Bouchard, (ex officio) Steve Walton, Christopher Marston, Maryellen Russo, and two who stepped forward on an *ad hoc* basis, Suzanne Wray and Arron Kotlensky.

As reported in the newsletter, HQ has posted the Membership Committee’s full report online. Everyone in the Society needs to understand both our situation and who we are before moving forward with an appropriate plan. The Committee also asks that you review the poster with early survey responses located at the poster session.

HQ is working with Marni on sister society ad exchanges in SIAN this summer and fall. Likewise, we have a list of industrial museums as potential venues for the wonderful new rack cards Daniel designed. Please share society and museum suggestions for the rack cards with HQ. Steve has asked that each of you hand out these cards to those who might be interested in IA.

You never know what might come from one of these magic cards. A not quite young historian brought back all sorts of materials from the 1989 Quebec Conference and gave them to a young HAER architect named Christopher Marston. That worked out more than OK for the Society! Bottom line: not only is the average loss of nearly 60 members a year since 2002 existential, but it’s starting to look like a retention problem. Unfortunately, neither the pilot survey nor the follow-up survey planned for fall can reach non-renewing members. To that end, we’re looking for several volunteers to help do what might be called exit interviews. Ideas or concerns about membership issues? Tell someone on the Membership Committee or the Board. Thank you for helping SIA to continue to thrive and grow.

### **Industrial Heritage Preservation Grants (IHPG).**

Committee member Duncan Hay reported that five organizations applied for SIA IHPGs in 2018. All five organizations requested the full \$3,000 allowed under the program. With \$5,000 available in the grant fund this year, the committee recommends funding two projects.

Friends of Pump House and their partners have been working hard to restore and revitalize the 1883 Byrd Park Pump House and adjacent portions of the James River and Kanawha Canal. Many conference attendees will be able to see the results of their efforts during Friday and Sunday tours at this year’s conference. There is still a tremendous amount of work to be done, but an outdoor exhibit will help visitors and Richmond residents get a better sense of what’s in store and what makes the place so special.

Onondaga Historical Society will use SIA grant funds to support large-format photography and other documentation of the recently uncovered remains of a steam-powered salt-brine pump house. Syracuse calls itself the Salt City. The industry once covered a vast territory just north of downtown, but surprisingly little physical evidence survives. Salt was extracted here by injecting hot water into deposits that lay close to the surface, allowing the salt to dissolve, and pumping the resulting brine back to the surface to be evaporated by the sun in shallow pans and then refined in kettles in coal-fired boiling blocks. Documentation of the Syracuse pump house will further our understanding of salt and chemical industries that once defined a region, but have now almost disappeared.

This year’s committee included Suzanne Wray, Paul White, and Duncan Hay, with support and advice from SIA President and former committee chair Maryellen Russo and essential behind-the-scenes work by Daniel Schneider at SIA headquarters.

The diversity of this year’s applications was intriguing. The committee looks forward to seeing more next year. Please help spread the word by letting your colleagues and associates know about SIA’s grant program. A member asked where the grant money comes from. Treasurer Nanci Batch-

(continued on page 20)

## MINUTES (continued from page 19)

elor stated that it comes from donations and \$3,000 comes from operating funds.

**Student Scholarships.** Patrick Harshbarger, chair of the student scholarship committee, presented the recipients of travel stipends to attend this year's annual conference in Richmond. The committee consists of Seth Price, Scott See, and Suzanne Wray. Patrick thanked the many SIA members who have made contributions to the Society's scholarship fund. It is a very successful program that for about 30 years has been used to encourage students to learn about the SIA, take part in our conferences, and ultimately to become long-term members and leaders of the Society. This year's recipients are Aurora Donoso-Sequeiros, a doctoral student at the University of Seville, Spain, who is here to present a paper on her study of the Tharsis Sulphur & Copper Company Pier in Huelva; Zach Liollo, a master's degree candidate at the Citadel and here to present his hands-on research into the processes behind hot riveting; and Oscar Rodriguez Cavielles, a doctoral student at the National University of Distant Education of Spain who is currently a Fulbright Scholar at Michigan Tech and here to present a paper related to his dissertation on industrial heritage tourism in Spain.

**The International Committee for the Conservation of Industrial Heritage (TICCIH).** Maryellen Russo presented a report from TICCIH Representative Bode Morin.

The most significant recent international development is the U.S. withdrawal from UNESCO. Following a simi-

lar withdrawal in 1984, the resumption of participation in 2002, and the elimination of U.S. funding for UNESCO in 2011, the current administration formally announced the withdrawal in Feb. to be executed at the end of 2018. One of the key roles for SIA regarding UNESCO is the World Heritage Convention. Although in practice the withdrawal only affects our role in UNESCO governance and voting on World Heritage, NPS staff suggested that this administration may be considering not putting forth any new nominations. During the last withdrawal, the U.S. continued to participate in World Heritage through site nominations and hosting conferences and meetings.

A report on the process of updating the U.S. Tentative List for UNESCO World Heritage was published in *SIAN* Vol. 45, No. 2 (Spring 2016).

The triennial TICCIH Congress will be held in Santiago, Chile, on Sept. 13–14, 2018. The theme of the congress is "Industrial Heritage: Understanding the Past, Making the Future Sustainable."

TICCIH President Pat Martin reported that TICCIH continues to be a vital organization connecting students, managers, and enthusiasts about industrial heritage on the global stage. In its 45th year, TICCIH has about 50 countries as active affiliate members, with SIA serving as the national organization for the U.S. The next Congress will be held in Montreal in 2021. The *TICCIH Bulletin* can be found on the TICCIH website. TICCIH also serves as an expert advisory body to the UNESCO World Heritage Program through our partner organization ICOMOS (The International Council on Monuments and Sites). Working with ICOMOS, we help to identify and evaluate sites and landscapes that have Outstanding Universal Value in the area of industrial heritage. TICCIH welcomes fellow SIA members to join and participate in the exciting realm of international industrial heritage.

**Chapter Recognition.** Past President Amanda Gronhøvd led the traditional roll call of local chapters.

**Vogel Prize.** Arron Kotlensky read the Vogel Prize citation and presented the award to Fredric Quivik (see article elsewhere in this issue).

**General Tools Award.** Jet Lowe read the General Tools Award citation and presented the award to Fredric Quivik (see article elsewhere in this issue).

**Recognition & Thanks to Outgoing Board members.** President Maryellen Russo recognized the following outgoing Board members and thanked them for their service: Amanda Gronhøvd (Past President), Marc Belanger, and Seth Price (interim Board member, finishing Steven Walton's term).



Maryellen Russo

*This year's Student Scholarship recipients were recognized at the SIA's annual business meeting. From left to right: Oscar Rodriguez Cavielles, Zachary Liollo, Patrick Harshbarger (Student Scholarship Committee Chair), and Aurora Donoso-Sequeiros.*



**Elections.** Nominations Committee Chair Bill Vermes reported: The Nominations Committee consisted of Bill Vermes (Chair), Mike Raber, John Mayer, and Amanda Gronhovd (Past President). From Dec. 2017 through Mar. 2018, the committee received suggestions and assistance from President Maryellen Russo and Vice President Christopher Marston. The committee presented to the SIA membership the following slate of candidates: President: Christopher Marston; Vice President: Tim Mancl, Saul Tannenbaum; Board of Directors: Rebecca Burrow, Seth Price, David Simmons; Nominations Committee: Marc Belanger, Ian Hay; TICCIIH Representative: Bode Morin.

The ballot deadline was May 23, 2018. Most ballots were received by this date; however, all ballots received before the chair's departure for the annual conference (May 31) were included in the vote counting. Ballot counting was performed Fri. evening, June 1, by Bill Vermes, Mike Raber, and Amanda Gronhovd. Over 230 ballots were counted. Three ballots were received at the chair's home after the conference and were not included in the vote totals.

The results of the election are Christopher Marston as President; Saul Tannenbaum as Vice President; Rebecca Burrow and David Simmons elected to the Board of Directors; Ian Hay elected to the Nominations Committee; and Bode Morin as TICCIIH Representative.

Following the Friday evening ballot counting, the three committee members present discussed two nomination suggestions. First, one ballot included a note suggesting that ballots include a summary of duties to be performed by officers, directors, the nomination committee, and TICCIIH representatives. (These duties are included in the Fall newsletter, but the committee did feel that this suggestion is worth considering.) Second, following discussion of the low ballot turnout (~25%), Mike Raber discussed the advantages of online balloting and noted SIA's recent online survey extended to the membership. The committee does recognize that SIA's membership includes those who would prefer paper ballots over electronic.

The 2018–19 Nominations Committee will consist of Mike Raber (Chair), John Mayer, Ian Hay, and Maryellen Russo (Past President).

**New Business /Announcements.** Newly elected President Christopher Marston thanked Maryellen Russo for her service as SIA President the last two years. Then he called for a short board meeting at 5:30 p.m. for the new Board members, Sat. June 2 (after the paper sessions).

**Adjournment.** At 2:10 p.m. (ET), new President Marston asked for adjournment, which was moved and seconded.

*Respectfully submitted,*  
**James Bouchard, Secretary**

## CHAPTER NEWS

On May 7, the **Oliver Evans Chapter** (Greater Philadelphia) held a presentation at the Fairmount Water Works Interpretive Center. Speaker Rich Wagner, a Pennsylvania brewery historian and home brewer, presented on the topic of *Breweries of the Schuylkill: A Virtual Trip Upstream*. During the 19th and 20th centuries, 80 breweries were located in many towns along the banks of the Schuylkill, including 38 in Philadelphia and 22 in Reading. On June 9, APT-DVC and the Oliver Evans Chapter explored the cement manufacturing industry in the Lehigh Valley. The tour included historic cement manufacturing sites such as the Coplay Cement Co. vertical kilns; a museum dedicated to the Atlas Cement Co., the cement manufacturing giant of the 20th c.; and an active cement manufacturing plant, LaFargeHolcim.

The **Roebling Chapter** (Greater N.Y.-N.J.) kept up its traditionally busy event schedule during the late spring and early summer, with tours of the Roebling Museum; a private charter of the schooner *A.J.Meerwald*, New Jersey's tall ship; a walking tour of a seldom-visited stretch of the Morris Canal along the Rockaway River between Denville and Rockaway; Fort Hancock at the entrance to New York Harbor; and the Decker-Kincaid Homestead, Mines and Forge Site.

**Support Your Local Chapter.** For info on a chapter near you or to start one, check out the local chapters section of the SIA website ([www.sia-web.org](http://www.sia-web.org)). ■

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## FRED QUIVIK (continued from page 5)

were a model for getting work done efficiently in the most trying of conditions. I am certain that Fred's insights on various projects have inspired other professionals to elevate their work above the norm. I conclude by quoting Carol Poh in her email to me regarding Fred's work with the SIA: "It is through his scholarship and his selfless contributions in the realm of continuing education in the material culture of IA—tours, one of the four pillars of the SIA—that he has enriched and furthered the field and the Society."

Put another way, Fred has contributed hugely to our organization in countless ways, but perhaps most importantly, Fred has expanded the way we think about our field. With great pleasure, we present the 2018 General Tools Award to Fred Quivik.

## PUBLICATIONS OF INTEREST (continued from page 12)

renovated and moved about 50 ft. to create a new gateway to the National Mall at the Constitution Gardens section. The stone building once sat at the junction of the Washington City Canal and a section of the Chesapeake & Ohio canal near a large wharf at 17th St. on the Potomac River. The house is the oldest existing building on the Mall, according to the National Park Service.

- ◆ Chuck Williams. **Two Old Powerhouses On the Chattahoochee River to Find New Life as an Event Venue.** *Ledger-Enquirer* (Columbus, Ga.) (July 25, 2018), [www.ledger-enquirer.com](http://www.ledger-enquirer.com), search on historic powerhouses. Renovations of two powerhouses that sit on an island in the Chattahoochee River in Columbus are nearing completion. Built in 1899 and 1900, the powerhouses will provide event space and are the final piece of a 15-year project to turn an 1800s-era mill into a mixed-use complex of condos, apartments, restaurant, retail, and office space.

## TEXTILES

- ◆ David LaVigne. **More Than Mines: Industrial Decline, Gender, and the Iron Range's Cluett, Peabody, and Company Arrow Factories, 1946–1979.** *Minnesota History* (Summer 2018), pp. 54–65. As high-grade iron ore reserves reached exhaustion after WWII, one of the industries that helped sustain families on the Iron Range was apparel manufacturing, which employed thousands of women to sew men's dress shirts, underwear, and pajamas. A one-page sidebar looks at reuse of the former Arrow factories.

## BRIDGES

- ◆ **Historic Bridge Bulletin** Vol. 5, No. 2 (July 2018) highlights five bridges that editor Nathan Holth visited during a recent bridge tour in England, Wales, and Scotland: Royal Albert Bridge, Connel Bridge, and three bridges at Castle Conwy. Discusses how the history, design, and maintenance of British bridges differs in comparison to historic bridges in the U.S.

## POWER GENERATION

- ◆ Richard Rhodes. **Energy: A Human History.** Simon & Schuster, 2018. 480 pp. \$30. Four centuries of the evolution of energy and how society uses it, as well as unintended environmental consequences and how society has dealt with those. Rev.: *NYT Book Review* (June 24, 2018), p. 16; *WSJ* (June 23-4, 2018), p. C7.
- ◆ Dave Northrup. **Dazzling White: A Powerfully Built Beacon of Industry.** *New York Archives* (Summer 2018), [www.nysarchivestrust.org](http://www.nysarchivestrust.org). The gleaming white Amsterdam Steam Generating Station of the Adirondack Power & Light Corp. was short-lived as a power house but the building still stands as a warehouse for concrete products.
- ◆ **Windmillers' Gazette**, Vol. 37, No. 3 (Summer 2018) includes Kevin Moore, Byron Jackson's *California Windmill and Ingels Brothers' Windmills*; and T. Lindsay Baker, *Bill Brownfield, B.H. "Tex" Burdick, and the Opening of an Irrigation District; Parades and Windmills; and Replacing Pump Leathers*. Avail: \$20/yr., published quarterly. Christopher

Gillis, Editor, P. O. Box 788, Buckeystown, MD 21717; [www.windmillersgazette.org](http://www.windmillersgazette.org).

## MISC. INDUSTRIES

- ◆ Bruce C. Greenberg [SIA]. **Greenberg's Guide to Lionel Trains, O Gauge, Vol. 1, 1915–1928.** Brinkmann Pub., 2018. 424 pp., 1,800+ photos. \$100. <http://www.sykesvillehistory.us/Brinkmann/Page/lionel-oGauge.html>. A comprehensive treatment of all locomotives and rolling stock available between 1915 and 1928. Each locomotive is accompanied by rolling stock photos and outfit boxes (when available). Thoroughly illustrated in color and with dozens of production charts plus estimated values where available.
- ◆ Paul McNeil. **The Visual History of Type.** Lawrence King Pub., 2017. 672 pp., illus. A detailed survey of the major typefaces produced since the advent of printing with movable type in the mid-15th c. to the present day. More than 320 typefaces are displayed chronologically in the form of their original type specimens or earliest printing. Each entry is supported by a brief history and description of defining characteristics of the typeface.

## ABBREVIATIONS:

|          |   |
|----------|---|
| CH       | = Construction History, Journal of the Construction History Society   |
| CBT      | = Covered Bridge Topics, published by the National Society for the Preservation of Covered Bridges  |
| IA News  | = Bulletin of the Association for Industrial Archaeology (U.K.), <a href="http://www.industrial-archaeology.org">www.industrial-archaeology.org</a> . |
| NYT      | = New York Times  |
| OMN      | = Old Mill News, published by the Society for the Preservation of Old Mills (SPOOM)   |
| SCA      | = Society for Commercial Archeology   |
| SPOOM    | = Society for the Preservation of Old Mills   |
| TICCIH   | = The International Committee for the Conservation of the Industrial Heritage, <a href="http://www.mnactec.com/ticcih">www.mnactec.com/ticcih</a>     |
| Timeline | = published by the Ohio Historical Society, \$40/yr. Info: (614) 297-2315   |
| TT       | = Timber Transfer. Published by Friends of the East Broad Top. Avail. with membership. \$30/yr. <a href="http://www.febt.org">www.febt.org</a> .      |
| WSJ      | = Wall Street Journal   |

**Publications of Interest** are compiled from books, articles, and digital media brought to our attention by you, the reader. SIA members are encouraged to send citations of new and recent books, articles, CDs, DVDs, etc., especially those in their own areas of interest and those obscure titles that may not be known to other SIA members. *Publications of Interest*, c/o Marni Blake Walter, Editor, SIA Newsletter, 11 Esty Rd., Westmoreland, NH 03467; [sianeditor@siahq.org](mailto:sianeditor@siahq.org).

## IA EXHIBITS

**Atomic Histories: Remembering New Mexico's Nuclear Past**, through May 31, 2019 at the New Mexico History Museum (Santa Fe), explores famous events, sometimes little known stories, and inventions born in New Mexico, and helps to recognize the contributions of thousands of people involved in New Mexico's atomic history during the last 75 years. Beginning with the first research and fabrication of nuclear weapons in Los Alamos for the Manhattan Project and the first atomic bomb test at the Trinity site near Alamogordo during WWII, the exhibit also includes information about the two national laboratories founded in Los Alamos and Albuquerque at the onset of the Cold War, mines in the Grants Mineral Belt, the Waste Isolation Pilot Project in Carlsbad, and a new uranium enrichment plant in Eunice. Two large-scale installations by Meridel Rubenstein are featured in this exhibition. Info: <http://nmhistorymuseum.org>.

**Harry Wilks: Hudson River Bridges** is an exhibit at the Hudson River Museum (Yonkers, N.Y.), through Oct. 14, 2018. Since the early 1970s, Harry Wilks has photographed numerous architectural structures, including bridges over the Hudson River. In his photographs, Wilks seeks out locations where people have left a mark on the landscape, showing the Hudson River from a new perspective. Girders and railings frame or bisect the views, lines of structures intersect with lines in nature, and man-made elements are emphasized. Info: [www.hrm.org](http://www.hrm.org).

**Hot Off the Press: Printing and Papermaking**, a hands-on look at how the printed word revolutionized the spread of knowledge throughout the world, is on display at the National Museum of Industrial History (NMIH) through Oct. 31. From the Gutenberg press to linotype machines, the exhibit gives an in-depth and interactive look at how printing presses, paper, and ink were used to spark this influential industry. The exhibit includes rare printings, including 17th-c. translations, the first German-translated Bible printed in the Colonies, and the Ephrata Martyrs' Mirror, the largest book printed in Colonial America. Also on display are working printing presses that visitors will be able to use to print mementos, a one-of-a-kind scale model of a Fourdrinier papermaking machine, and mosaics saved from the now-demolished Bethlehem Steel Printery. Several special events related to the exhibit will be held. Info: <http://nmih.org>.

**Logging at the Bend of the River** is on display at the Warren County Historical Society, Queensbury, N.Y., through Nov. 30, 2018. The exhibit showcases the history of logging and papermaking in Warren County and the southern Adirondacks and features the role of some of the region's oldest companies, Finch in Glens Falls and International Paper in Ticonderoga (and formerly South Glens Falls). It depicts how the logging industry influenced the growth of local communities, and it also highlights the importance of the Hudson River and its "bend" at Glens Falls in creat-

ing an epicenter for logging and papermaking in the North Country. Info: [www.warrencountyhistoricalsociety.org](http://www.warrencountyhistoricalsociety.org).

If planning a trip to Germany, be sure to include the **LWL-Industriemuseum (Westphalian State Museum of Industrial Heritage)** on your itinerary. The museum was started in 1979 after the Westphalia-Lippe regional authority (LWL) decided to take action to preserve buildings, objects, and memories of everyday life and work. It is housed on eight former industrial sites: the Zollern Colliery, Dortmund; the Hannover Colliery, Bochum; the Nightingale Mine, Witten; the Henrichshütte Ironworks, Hattingen; the Henrichenburg Ship Lift, Waltrop; the Bocholt Textile Factory, Bocholt; the Brickworks Museum, Lage; and the Gernheim Glassworks, Petershagen. Info: <http://www.lwl.org/industriemuseum/english>. ■

## IA ON THE WEB

The *Dayton Daily News* online has two photo galleries and a video on the Mound Cold War Discovery Center, a stop on the upcoming Fall Tour. **Atomic Bomb Triggers and Radioactive Electric Generators: Made in Dayton** ([www.mydaytondailynews.com/news/atomic-bomb-triggers-and-radioactive-electric-generators-made-dayton/](http://www.mydaytondailynews.com/news/atomic-bomb-triggers-and-radioactive-electric-generators-made-dayton/)), search on Mound Laboratories) includes historic photos and a related video on the transformation of the historic Mound Laboratories into the present-day office park. Another photo gallery illustrates the new Mound Cold War Discovery Center: [www.mydaytondailynews.com/news/local/photos-mound-cold-war-discovery-center/](http://www.mydaytondailynews.com/news/local/photos-mound-cold-war-discovery-center/), search on Mound Cold War.

**Small Businesses Breathe New Life into Historic Shirt Factory in Glens Falls** (<https://www.youtube.com/watch?v=4inEMLVrv8o>). Video documents a small-business community with over 70 enterprises occupying a former sewing factory.

**U.S. President's Railroad Commission Photographs** (<https://digital.library.cornell.edu/collections/railroad>). The U.S. Presidential Railroad Commission was established by Executive Order No. 10891 of Nov. 1, 1960. In response to this order, railroad labor unions asked their members to document their workplaces such as train yards, stations and terminals, railroad tracks in urban and rural settings, industrial sidings and facilities, and locomotives. This request yielded over 1,655 photographs of the railroad facilities and equipment of 48 carriers across the U.S., which are now digitized and available online.

*IA on the Web* is compiled from sites brought to the editor's attention by members, who are encouraged to submit their IA Web finds: [sianeditor@siahq.org](mailto:sianeditor@siahq.org). ■



# **SOCIETY FOR INDUSTRIAL ARCHEOLOGY**

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## CALENDAR

### 2018

**Sept. 13–16:** Preserving the Historic Road 20th Anniversary Conference, Fort Collins, Colo. Info: [www.historicroads.org](http://www.historicroads.org).

**Sept. 27–30: SIA FALL TOUR, DAYTON, OHIO.** Info: [www.sia-web.org](http://www.sia-web.org).

**Oct. 11–14:** Society for the History of Technology Annual Meeting, St. Louis, Mo. Info: [www.historyoftechnology.org](http://www.historyoftechnology.org).

**Oct. 17–20:** Society for the Preservation of Old Mills Annual Conference, East Meredith, N.Y. Info: [www.spoom.org](http://www.spoom.org).

**Nov. 10: GREAT FALLS SYMPOSIUM ON THE IA OF THE NEW YORK–NEW JERSEY AREA, PATERSON, N.J.** 38th annual event held by the SIA's Roebling Chapter. Info: <http://roebblingsia.org/symposia.html>.

### 2019

**Jan. 9–12:** Society for Historical Archaeology Conference on Historical and Underwater Archaeology, St. Charles, Mo. Info: [www.sha.org](http://www.sha.org).

**Mar. 27–30:** National Council on Public History Annual Meeting, Hartford, Ct. Info: [www.ncph.org](http://www.ncph.org).

**Apr. 24–28:** Society of Architectural Historians Annual International Conference, Providence, R.I. Info: [www.sah.org](http://www.sah.org).

**June 6–9: SIA 48th ANNUAL CONFERENCE, CHICAGO, ILL.** Info: [www.sia-web.org](http://www.sia-web.org).

**Aug. 9–14:** Assn. for Industrial Archaeology Annual Conference, Somerset, U.K. Info: [www.industrial-archaeology.org](http://www.industrial-archaeology.org). ■