

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

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KANSAS CITY SIA 45TH ANNUAL CONFERENCE REVIEW

Nearly 120 SIA members converged on Kansas City, Mo. for the 45th Annual Conference, June 2–5, 2016. Initially called “The Town of Kansa” after the Kansa tribe of Native Americans, the city was officially incorporated in 1853. Located near the confluence of the Missouri and Kansas rivers, the city initially prospered due to its strategic location relative to the river trade, outfitting wagon freighting for the Santa Fe and Oregon trails, and supplying local ranchers, farmers, and millers. With the construction of the Hannibal & St. Joseph Railroad Bridge across the Missouri in 1869, Kansas City became a major player in the livestock industry. Upon this foundation, other industries were attracted to the city. Businesses involved in automobile manufacturing, aircraft production, metal products, paper products, and food and spirits were among those visited during our conference tours.

By the 1880s, ten rail lines delivered stock and freight to Kansas City. Our high-rise conference hotel, the Westin Kansas City at Crown Center, offered panoramic views of

the historic industrial buildings and warehouses that make up the Crossroads Freight House District. It is immediately adjacent to the magnificent **Union Station** of 1914, an active Amtrak station that also houses a science museum and history exhibits.

The conference followed a traditional SIA format of Thursday pre-tours and opening reception; Friday industrial process and site tours, followed by an evening film festival; Saturday paper sessions, business meeting, and evening banquet; and Sunday post-tours.

Cydney Millstein [SIA] deserves praise and thanks for her pivotal role in organizing the Annual Conference. Cydney did a fantastic job showcasing Kansas City’s industrial history. She was assisted by Julie Blair, SIA’s Events Coordinator, and a host of local volunteers and sponsoring organizations (see Annual Business Meeting minutes in this issue).

This year’s conference featured an active social media effort through Twitter, moderated by SIA Director Saul Tannenbaum. The social media generated by SIA members

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Nathan Holth

Waddell’s A-Frame Bridge.

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was gathered up by Saul and posted to Storify (<https://storify.com/stannenb/society-for-industrial-archeology>). This provided an interesting platform for members to share activities with each other in real time.

The *Kansas City Star* ran a feature article on the conference and activities of the SIA. The article with the title of *Society for Industrial Archeology Finds Intrigue in GM Fairfax Plant* (June 3) is available at www.kansascity.com/news/local/article81639752.html.

The following are tour reports submitted by SIAN's volunteer correspondents:

Thursday Pre-Tour 1—Aircraft, Pratt & Whitney. This half-day tour made its way to suburban Kansas City and the **Bannister Federal Complex**, originally known as Plancor 1213 by the U.S. War Assets Administration or colloquially as the Pratt & Whitney aircraft plant. This sprawling factory complex, now largely vacant, was constructed during WWII in less than nine months. As we found out during our in-depth walking tour, the complex's architectural significance is related to architect Albert Kahn's "Warspeed" concept, which used barrel-vaulted, precast-concrete arches

for roof supports. These arches lacked reinforcing steel, due to wartime restrictions, but they have held up remarkably well (HAER MO-118).

The focus of our tour was the 2.7-million-sq.-ft. Main Manufacturing Building, which was considered the largest entirely air-conditioned building in the world when it opened in 1943. During the war, the plant produced Pratt & Whitney's R-2800-18W-model engines that were used mostly in Corsair aircraft. Total production numbered 7,934 engines by war's end. When production stopped on VJ Day, there were 21,000 employees on the payroll. One of the highlights of our tour was seeing the interior of the windowless, concrete-cube testing cells where each engine was tested before being shipped.

After the war, the plant was used as a collection point for military surplus. In 1947, the largest portion was leased by the federal government to Westinghouse Electric for building turbojet engines. We also saw a couple of remaining jet-engine test cells. Since 1949, part of the complex has been used for the manufacture and storage of non-nuclear components for nuclear weapons. This area was off-limits during our tour, which accounted for the high level of security even though we were walking through what was a mostly empty building. After Westinghouse Electric closed down the jet engine plant in 1960, the facility was transferred to the U.S. General Services Administration. It has since been used by various units of the federal government, including the U.S. Post Service as a supply distribution center.

Thursday Pre-Tour 2—Museums. A highlight was the **Linda Hall Library**, billed as "the world's foremost independent research library devoted to science, engineering, and technology." Herbert Hall was a Kansas City businessman who amassed a sizeable estate through his grain business. Since he and his wife Linda had no children or immediate heirs, they decided to leave a cultural legacy to the city by creating a science and technology library, which was established in 1946. Since that time, the library has collected actively, including absorbing the former library collections of the American Academy of Arts & Sciences, the Franklin

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 biannually. 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 \$50; 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@mtu.edu; Website: 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.

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John Reap

SIA group outside the Lewis & Clark Combined Arms Center at Fort Leavenworth. The lamp symbolizes knowledge.

Institute, and the Engineering Societies Library. Our tour included a behind-the-scenes look into the collections, including some very rare 16th- and 17th-century volumes.

The **Nelson-Atkins Museum of Art** is located in a Beaux Arts-style building, which opened in 1933 and was modeled after the Cleveland Museum of Art. A second gallery, the Bloch Building, opened in 2007. This building is Modernist in style with glass towers that allow diffused natural light into the gallery spaces. The glass uses ultra-violet radiation block principles to protect the art from light damage.

Next we journeyed to a bluff overlooking downtown and the **National World War I Museum and Memorial**. At the end of WWI in 1919, a group of Kansas City businessmen formed the Liberty Memorial Association with the idea of building a long-lasting monument to veterans of the war. A 217-ft.-tall reinforced-concrete tower surrounded by a plaza was completed in 1926. The memorial had deteriorated by the 1990s to the point that the city closed it to visitors. This sparked an effort to restore the memorial and create a state-of-the-art museum in a space carved out underneath the tower. The museum opened in 2006 with its new name, and is now considered to have the most comprehensive WWI exhibits in the U.S.

Thursday Opening Reception. The opening reception was an opportunity to catch up with old friends and new members. Scott Wagner, Mayor Pro Tem of Kansas City, welcomed the SIA to the city. The evening was capped by a presentation by landscape architect Paul J. Novick on the history of Kansas City's famed parks and boulevards system. The presentation was based on the National Register nomination written by Novick and 2016 SIA Annual Conference organizer Cydney Millstein. The park system, designed by George E. Kessler beginning in 1893, features parks and green spaces linked together by boulevards. It is considered a model of the City Beautiful movement and was listed on the National Register of Historic Places on Aug. 9, 2016 (shortly after the conference).

Friday Tour 1—Manufacturing & Power. This tour featured the **General Motors Fairfax Assembly Plant**. The 572-acre facility was established in 1945 as a dual-purpose manufacturer of automobiles and jet fighters. The present facility, constructed in 1985, has 95 acres under roof and through continual investment is considered one of GM's most productive plants. Since 2003, the plant has produced the Chevy Malibu and Buick LaCrosse. GM is currently the largest employer in the metro area. We were treated to an introduction by plant management and a tour of the assembly line.

Subtropolis took our tour underground into a 270-million-year-old limestone deposit that has been carved out by the room-and-pillar method to create an 1,150-acre industrial park and underground storage facility. The manmade cave is operated by real-estate developer Hunt Midwest, which also has interests in mining and construction. Our bus traveled through this subterranean world enjoying the benefits of 40-ft.-wide, 16-ft.-high corridors within a completely dry and constant-temperature, brightly lit environment. Among the Subtropolis's largest tenants are e-commerce companies that store and ship their products

to Internet customers, as well as automobile manufacturers and dealers who store new automobiles in an area known as "automotive alley."

The tour concluded in downtown Kansas City at two power plants. The first was **Veolia Energy's Metropolitan Street Ry. Powerhouse**. This Romanesque Revival-style building was said to be the largest electric railway powerhouse outside of New York City when it opened in 1903-04. The plant, which has been upgraded since the street railway days, now provides steam heat, chilled water, and cogenerated electricity to 60 customers in the central business district. The plant reached net-zero waste in 2013 and has a generating capacity of 5 megawatts. Our next stop was the former Union Station power plant, which opened in 1914 to provide electricity for the neighboring railroad station. This building has been adapted for use as the **Todd Bolender Center for Dance & Creativity**, which is also home to the Kansas City ballet. The architects retained some of the original industrial character including the overhead crane and exposed steel-frame structure.

Friday Tour 2—Historic Kansas City & Surrounds. This tour headed about one hour northeast of Kansas City to **Watkins Woolen Mill State Historic Site**. We were greeted in the visitor's center by costumed interpreters who then led us into the park to visit the historic buildings. The highlight was the three-story woolen mill of 1860, which retains a

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Operator and drawing press at cookware maker Vita Craft.

John Reap

remarkable level of historical integrity, including almost all of its original machinery. The mill was recorded by HAER in 1978 (HAER MO-1) and described as containing “the finest collection of mid-19th-century textile machinery *in situ* in North America and some of the most significant textile artifacts known to survive.” The mill didn’t disappoint with one awe-inspiring machine after another, with unfortunately little time to absorb all of the details. The guided tour roughly followed the steps in wool processing from scouring through picking, carding, spinning, and weaving, with many sub-steps along the way. This tour also took in the Watkins House, where mill owner Waltus L. Watkins and family lived and oversaw the operations of the mill and a 3,360-acre plantation that also included a brick kiln, blacksmith shop, workers’ housing and numerous agricultural enterprises.

The **Holladay Distillery** turned out to be a diverting location for lunch and a tour, followed by a tasting. The distillery traces its origins to 1856 when Benjamin Holladay was attracted to the location due to a limestone spring that offered naturally purified water for the making of spirits. Holladay was very entrepreneurial; in addition to the distillery, he became “the stagecoach king” due to his investment in stagecoaches running from Missouri to the West Coast. The distillery changed owners over the years and was reopened after Prohibition as the Old Weston Distilling Co. and later as the McCormick Distilling Co., from which the current set of sheet-metal-sided warehouses dates. The current owners purchased McCormick in 1993. We were treated to a walking tour of the renovated still house, which only began producing bourbon in spring 2016, as well as a peek inside the warehouses to see the stacked aging casks.

Tension Envelope is located in Kansas City’s Crossroads area near our hotel and was the last stop on Tour 2. Senior management met our group with a great deal of enthusiasm, which began with a ride in the factory’s single and rather small passenger elevator, still employing a full-time operator. There followed a brief introduction and video presentation, and then we broke up into small groups for a process

tour. Tension Envelope is located in a former Montgomery Ward warehouse of 1908-10. The nine-story building occupies a full square block, and our tour focused on the pre-press and production areas of the 5th and 6th floors.

Even though it was late on Friday afternoon, the factory was running a shift and we were able to observe a range of operating machines, both old and new, which cut, fold, and print envelopes at remarkable speeds. It was reported that the 5th-floor production area produces close to 10 million envelopes per day. We were also told that the envelope business is highly competitive, and there were some areas of the plant and some information that could not be shared with outside visitors.

The forerunner of Tension Envelope was Berkowitz & Co., established in 1887 as a supplier of novelties and business stationery. Berkowitz began to fully concentrate on envelopes in 1901 and adopted high-speed machinery from Germany in the early 1920s. Berkowitz acquired the Tension Envelope Co. of Brooklyn, N.Y. in 1937 and soon thereafter consolidated under the Tension Envelope banner. Today, it is a multi-national company with facilities and fully-owned plants in the Pacific Rim, but still family-owned. This factory, as the oldest and the one most associated with several generations of Berkowitz owners, seems to retain a special sense of history within the current corporate structure.

Friday Tour 3—Roasting, Brewing & Technology. Our first stop was **The Roasterie**, established by Danny O’Neill, self-described “bean baron” and owner/founder, who encouraged us to “live life on the rim.” O’Neill started the business in his home in 1993. The company’s logo is a plane representing its superior roasting technique (beans are air-roasted via convection method) and commitment to transporting its product to the customer as quickly as possible. Sourcing from 28 different countries, from growers in the highest altitudes, the Roasterie prides itself on sustainability efforts. Hot air from the convection process is used to heat both air and water in the facility. In addition to extracting oxygen from the beans when packaging, they add a nitrogen flush to retain freshness. We ended the tour with a manual brewing

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Patrick Harschbarger

Test cells at the Pratt & Whitney aircraft engine factory.



Steve Walton

The vast underground landscape inside Subtropolis.



Duncan Hay

2016 General Tools Award Recipient

Duncan Hay is among those who have combined their primary area of expertise with a nuanced understanding and application of many of the subject areas that make up the practice of industrial archeology. From his graduate studies in the history of technology, which culminated in a doctoral degree in the History of Technology from the University of Delaware, through a variety of professional experiences, he has been deeply engaged in industrial archeology for his entire career.

In his work he has explored in detail—and expanded our knowledge of—topics such as waterpower, hydroelectricity, canals, waterways, structural engineering, and machine and woodworking shops. In his employment with the National Park Service, he has worked to inventory and document historic sites and structures, develop exhibitions and programs, and provide technical support and advice to organizations from Maine to West Virginia. He also has worked as curator and consultant with museums in New England and the Mid-Atlantic. Through his publications, consulting, and surveys, he has contributed to a body of documentary information and outreach to a wide and diverse audience, as well as made valuable contributions to many historical organizations over the past 35 years.

Of particular note was Duncan's work for the Edison National Historic Site in West Orange, N.J., between 1990 and 1993. As part of a team that studied and planned for the management of the largest body of artifacts in the National Park Service system, Duncan wrote historic furnishing plans for the two machine shops, the pattern shop, and sections of the laboratory complex. His report was published by the NPS. In recent years his work on the Erie Canalway has involved inventorying and documenting historic sites and structures, advising on preservation opportunities, and developing exhibitions, publications, web content, and events for this 524-mile-long National Heritage Corridor that spans upstate New York. He has worked collaboratively with HAER teams, colleagues in the Park Service, and others on many projects involving industrial sites and structures, including the Blackstone River Valley and Niagara Falls National Heritage Corridors.

His service to SIA began early in his career, as a board member from 1984 to 1987, and organizer of the 1987 Conference in Troy. He has served on several SIA committees and organized other conferences, notably the very successful Annual Conference in 2015 (Albany), and the 2012 Fall Tour (Utica). His tenure as president, which involves a six-year commitment (as vice-president, president, and immediate past president), has occurred twice, between 1992 and 1998 and again from 2010 to 2016. But not resting on his laurels, he isn't done yet.



Patrick Harshberger

Duncan Hay (left) receives the General Tools Award from Charles Parrott at the 2016 SIA Annual Business Meeting in Kansas City.

Few people have devoted so much time and energy to further the cause of IA in so many ways for so many organizations over such a long period. Duncan Hay is highly deserving of our thanks and this acknowledgment of his sustained, distinguished service to the field with presentation of the 2016 General Tools Award.

The General Tools Award was established in 1992 through the generosity of Gerald Weinstein [SIA], chairman emeritus of the board of General Tools & Instruments, LLC 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. The 2016 committee members were Charles Parrott, who served as chairman, Bob Frame (who will serve as chairman in 2017), and Jet Lowe. 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, 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. ■

demo and coffee tasting (called “cupping”) followed by a quick stop at the pastry bar. Sweet! One tip from our guide: don’t store coffee in the refrigerator or freezer. Resulting condensation ‘tricks’ beans to begin releasing their flavor compounds.

Ryerson Metals was our second stop. Rudy Vasquez, operations manager, was our enthusiastic and energetic guide. His father worked at Ryerson before him, and Rudy himself has 32 years of service. For 170 years Ryerson has been doing first-stage processing, i.e., they buy and modify to order: stainless and carbon steel and aluminum in sheet, plate, bar, and tube forms. We saw experts in action: slitting, laser cutting, plasma cutting and oxy-fuel plate burning, and saw cutting. The 220,000-sq.-ft. union shop is one of 60 Ryerson locations in the U.S., Canada, Mexico, and China.

Our next visit was to **Zahner**, fabricator of architectural metal and glass (Ryerson Metals provides product to Zahner). We had lunch in Bill Zahner’s office and conference room, surrounded by fabulous art in metal and glass. He shared his family’s vision, explaining they “remove the constrictions of industry and expand the possibilities” while working with artists and doing R&D for commercial applications. Since its founding in 1897, four generations have been bringing art and architecture together. Zahner and its sister company **Metalabs** projects range from public art and massive sculptural buildings to interior metal-panel systems and bespoke furniture. Google ‘Zahner’ and take a look at their portfolio!

On the way to our final stop, we saw the 810-ft.-long **8th Street Tunnel** of 1887 that carried trollies between downtown Kansas City and the West Bottoms district, and then visited **Garment District Place Park**, dedicated in 2010. The central feature is a fountain and a 22-ft.-tall “Needle” sculpture, a tribute to the garment workers’ legacy. After WWI and through the 1940s, the area employed more than

4,000 workers who boasted that one out of every seven women in the U.S. purchased a Kansas City-made garment.

Boulevard Brewery was our last stop. After sampling some of the brew in their cozy on-site pub, our guide Bart provided a brief history of brewing and told the founder’s story. John McDonald was a woodworker with a fine arts degree who visited France and had a ‘beer-piphany.’ Like The Roasterie’s O’Neill, McDonald began his business at home. He brewed his first batch in 1989 and gradually built the business and a reputation for really good beer.

Friday Tour 4—Goods Manufacturing. This tour took us to five sites in and around Kansas City. Steve Null, Executive Director of the Jackson County Historical Society, served as tour guide, offering commentary on the numerous industrial buildings we passed. Our first stop was the **Ford Kansas City Assembly Plant**. The plant was initially used in 1953 for the production of B-1 bomber wings. Automobile assembly began in 1957. Today, the plant includes assembly lines for Ford’s F150 truck and its Transit van along with a stamping operation for the Transit. About 8,000 workers are currently employed with about 5.6 million-sq.-ft. under roof on the 1,269-acre site.

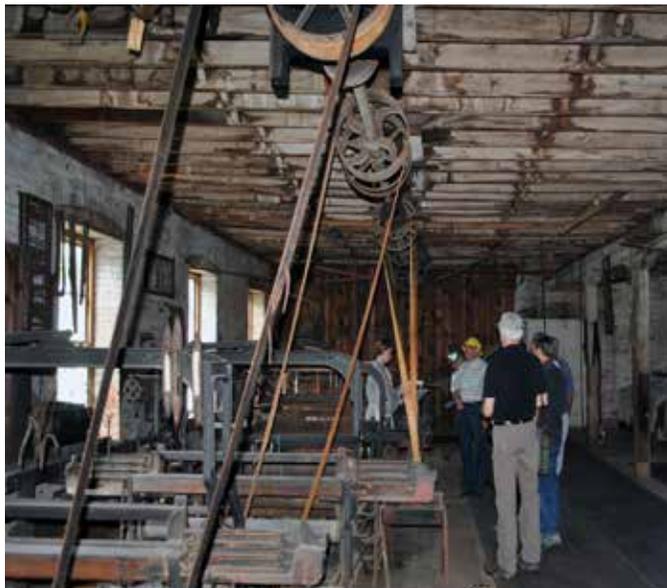
Our tour focused on the Transit assembly area. The assembly plant operates with a “just-in-time” process to produce about 64 F150s and 44 Transits per hour when the line is working. Sequencing of parts is critical with many parts provided by nearby suppliers. For example, seats are manufactured by a company located about 30 minutes away. The seat maker receives its orders four hours in advance of expected delivery.

Faultless Starch was founded in 1887 by Thomas G. Beaham. The company remains family owned by the founder’s great-great-great grandchildren. Faultless occupies a complex of early 20th-century buildings for offices, manufacturing, and warehousing. The tour visited the aerosol



Steve Walton

SIA group inside the Veolia Energy’s Metropolitan Street Ry. Powerhouse.



Patrick Harshbarger

Looms and line-shafting inside the Watkins Woolen Mill.

Sean Gohman—2016 Vogel Prize Recipient

Many members of SIA have worked with, or at least are familiar with, the National Register of Historic Places, the official federal listing of properties worthy of preservation. Fewer of us, however, have been tasked with using it to evaluate a historic resource consisting of industrial residue. Such was the charge given Sean Gohman of Michigan Technological University by the Keeweenaw National Historical Park Advisory Commission in 2011. Sean takes inspiration from Richard Francaviglia, whose book *Hard Places* insisted that even though mining landscapes may not be pretty, they still have an important story to tell. Helping to identify which piles of industrial waste are worthy of preservation on a scale never before attempted was Sean's assignment, a responsibility that he admirably fulfilled and expertly outlined in his article "It's Not Time To Be Wasted: Identifying, Evaluating, and Appreciating Mine Wastes in Michigan's Copper Country" in the Volume 39 double issue of *IA*.

Michigan's Upper Peninsula was a perfect venue for an industrial residue study because the purity of its native copper did not, for many years, require chemical refinement, avoiding the remediation required by environmental regulations designed to protect the health of humans and wildlife.

The article details the most innovative element of Sean's project: the application of National Register criteria devised to evaluate architectural, engineering, and archaeological sites to piles of industrial waste. Especially creative was the adaptation of a "method of construction" in Criterion C to the relationship between a pile of rocks and a technical process. Sean's article explains the advisory commission's goal of prioritizing piles of waste rock, tailings, and slag for management and interpretation through a 100-point rating system. Ratings were based on National Register potential within the Copper Country context, integrity, historical importance, size and scale, visibility, and accessibility. The article is



Patrick Hansbarger

Sean Gohman (left) receives the 2016 Vogel Prize from David A. Simmons at the Annual Business Meeting.

accompanied by historic images, mapping, and modern photography to demonstrate the narrative power of mine waste, an element that adds "depth, scale, and impact" to industrial history.

Delivered at the Annual Business Meeting by David A. Simmons.

*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 to appear 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 illustration that support the thesis and conclusion are also important measures of scholarship worthy of the prize. Selection is made by the Vogel Prize Committee consisting of five members appointed by the president, who serve five-year terms. ■*

manufacturing line where we watched the filling of cans and two-piece assembly of spray-stems and caps. The product is then boxed and moved by conveyer to an adjacent warehouse. There are currently 80 employees. The company manufactures Bon Ami cleanser in another plant and also distributes the Garden Weasel cultivator.

Vita Craft, established in 1939, is currently Japanese owned. It manufactures cookware from multiple plies of stainless steel and aluminum resulting in a product that transfers heat well and is long-lasting. Metal blanks are pressed into kettles and pots, polished, handles attached, and finally cleaned and packaged. The multiple plies result in a product that transfers heat well and is long-lasting. The company's 29 employees produce about 300,000 pieces of

cookware annually with about 80 percent exported to Japan.

The **Kansas City Star printing plant** prints newspapers for the *Star* along with the *Wall Street Journal*, *USA Today*, Topeka and Wichita daily papers, and a number of regional weeklies. The printing "day" starts at 7 pm and ends at 4 am, so we were there during non-operating hours. The presses are housed in a plant built in 2006. Four crews of six pressmen can produce 70,000 to 80,000 papers per hour.

Jacob Rieger & Co. is a distillery producing spirits including whiskey, vodka, and gin. The company was re-established in 2014 after having been out of business since Prohibition. The original distilling company founded by Jacob Rieger was located across from the Livestock Exchange in the West Bottoms and produced spirits for sale

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Minutes of the SIA's 45th Annual Business Meeting

June 4, 2016

Call to Order. President Amanda Gronhovd called the Annual Business Meeting to order at 12:51 pm (CT) in the Washington Park Room of the Westin Kansas City at Crown Center in Kansas City, Mo.

President's Report. President Gronhovd noted that the last few years have meant a number of transitions for SIA. This conference is the first that Events Coordinator Julie Blair has planned from start to finish. SIA is currently negotiating the renewal of its headquarters contract with Michigan Technological University (MTU) and transitioning to a new newsletter editor. She thanked Patrick Harshbarger for his contributions, called attention to the advertisement for a new editor in the newsletter, and encouraged members who are interested or know of anyone who is interested to contact Patrick directly.

President Gronhovd also noted that anyone posting about the conference on social media should use #sia2016kc in their posts. She thanked Cydney Millstein for her work as the local organizer for the conference. Cydney is a long-time resident of Kansas City, a historic preservationist, and took a lot of time over the past year to ensure a great event.

Cydney thanked sponsors Burns & McDonnell, HDR, BNIM, Missouri Bank, SightDeckMC, Belger Crane Yard, Louis Berger, Boulevard Brewing Company, Hammerpress, Rieger Distillery, Visit KC, and the following individuals: Cynthia Ammerman, Dick Belger and Evelyn Craft, Ronald G. Berry, Carl Blair, Dr. William Clawson, Dr. Ray Coveny, Col. Rod Cox, Amanda Crawley, Kelvin Crow, Camilla Deiber, Bradley D. Heacock, Kitty Henderson, Kathryn Lamzik, Benny Lee, Emily Lenhausen, Hope Luhman, Kelsey Lutz, Steve Noll, Nancy Powell, Julie Sarson, Douglas Shaver, Col. Douglas L. Tystad, MaryAnn Warfield, Andrew Wilkins, and Bradley Wolf.

President Gronhovd thanked the Presentation Committee chaired by Erin Timms, with Steve Walton, Kitty Henderson, and assistance from Maryellen Russo.

Secretary's Report. Secretary Justin M. Spivey stated that minutes of the previous year's Annual Business Meeting were published in *SIAN* Vol. 44, No. 3 (Summer 2015). He asked for amendments or corrections; none were forthcoming. President Gronhovd called for a motion to approve the

2015 Annual Business Meeting minutes as published. David Simmons so moved, Fred Quivik seconded the motion, and it passed unanimously.

Treasurer's Report. Treasurer Nanci K. Batchelor read her report: "The following report is for the year that ended Dec. 31, 2015. The Society maintains its books and records on a cash basis, and a calendar year 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 2015 with a total fund balance of \$253,411. Cash receipts for the year totaled \$57,645. The majority of our annual income comes from membership dues. In 2015, the total dues received were \$33,075. The remaining balance is comprised of interest income, contributions to both the general and restricted funds, publication sales, and excess proceeds from tours and conferences. We discovered late in 2015 that we were relying on email notices and that paper dues notices had not been mailed to the membership, which resulted in very low cash receipts in December and January.

Total Expenses for the year were \$97,878. The production costs of our publications, the newsletter and the journal combined for a total of \$20,788. \$55,253 went towards labor; postage was \$3,641; insurance, prizes, awards, and scholarships were \$2,150. Office overhead and a few misc. items made up the rest.

The Society closed 2015 with excess expenses over revenue of \$34,505. The total fund balance was \$222,298 of which \$47,960 is in restricted funds. Through March 2016, the Society has had a total of \$36,929 in cash receipts and has spent \$13,612. If anyone has any questions regarding the Society's financial data, please feel free to see me after the luncheon."

President Gronhovd called for a motion to accept the Treasurer's report. David Simmons so moved, Fred Quivik seconded the motion, and it passed unanimously.

Headquarters Report. Executive Secretary Pat Martin reported that SIA Headquarters continues to chug along; as Nanci alluded, there was a hiccup with cash flow that has been resolved and will not happen again. There have been challenges with SIA's information technology systems, which Headquarters is working to improve, and he is always open to suggestions. As President Gronhovd reported, SIA is negotiating a renewal of the agreement to maintain its headquarters at MTU. There have been changes at Headquarters: following the retirement of former Office Manager Don Durfee, Pat also retired, but continues to remain involved.

The International Committee for the Conservation of the Industrial Heritage (TICCIH). Pat Martin serves as president of TICCIH, which is increasingly active in the U.S. The upcoming issue of *SIAN* (Vol. 45, No. 2) will have

Paper Committee Members Needed

Enjoy the Saturday Paper Sessions at SIA's Annual Conference? Want to be part of selecting the papers and assisting the speakers? We need your help on the paper committee! If you're interested, contact President Maryellen Russo at mrusso@blantonassociates.com.

a front-page article about progress in adding an industrial heritage site or sites to the World Heritage List maintained by ICOMOS. Although the U.S. would like to think that we're a premier industrial nation, none of the industrial sites currently on the list are in the U.S. At least one, and as many as three U.S. sites, are expected to be placed on the tentative list, the first step to nomination, the front-runner being the Brooklyn Bridge. High-level talks have taken place, the outlook is good, and Pat will keep members posted through *SIAN* and the TICCIH newsletter. Anyone who is not already a member of TICCIH should consider joining and becoming involved in international activities that can resound with his or her own work in the U.S. Successes elsewhere in the world have been inspiring for what could happen here.

IA Journal. Editor Fred Quivik reported that *IA* is published "theoretically twice a year" and is very close to being caught up. The next issue, coming out late this summer, will be a double theme issue about New Bedford, Mass. He is particularly excited about two articles by longstanding members Pat Malone and Chuck Parrott. The issue after that will also be a double theme issue on industry in Pennsylvania. He acknowledged the work of book review editor Carol Poh in collecting interesting reviews for each issue.

SIA Newsletter. Editor Patrick Harshbarger reported that *SIAN* continues to run on its quarterly schedule, with Vol. 45, No. 2 printed last week and in the mail soon. As editor, he is supported by quite a large group of individuals who contribute to the process of bringing the newsletter together, from individual members who report on activities in their areas to core volunteers who edit copy, check facts, and make contributions to regular features such as the Publications of Interest. Staff at Michigan Tech handles mailing, layout, and printing. He asked for a round of applause for all who contribute.

The summer issue of *SIAN* will cover the conference, and Patrick asked members to send in photos. Not all can

be used, but it is great to have dozens from which to choose. He figures that he has published 82 issues since he started as editor, and while he now wants to spend that time doing something else, he still finds it fulfilling. This is because it has brought him into contact with so many members, not only those who attend conferences, but also those whom he hasn't met in person but continue to send in comments on articles and news items. He acknowledged all of those who weren't in attendance at the conference but still make his job so rewarding.

Patrick pointed out the call for a new editor that was distributed in conference packets and announced his plans to ensure as smooth a transition as possible and remain involved in the Society's activities.

Industrial Heritage Preservation Grants. Past President Duncan Hay stated that for a number of years SIA has offered grants to support good work in the documentation and preservation of industrial heritage. The committee consists of Paul White, who was somewhere in middle of the Pacific at the time of the conference, Richard K. Anderson, Jr., President Gronhovd, and himself. The committee received a number of applications this year and selected the Catocin Furnace Historical Society and a joint application between a textile museum and the Historic American Engineering Record, which are very different but equally interesting projects.

The Catocin Furnace produced iron from 1706 to 1903, and in its Antebellum years, the workforce included enslaved African Americans. The proposed project is part of an initiative to expose that history and will include the conservation of two stoves and an ore cart dating from the era of slave labor. In the textile museum proposal, three-dimensional laser scanning, typically used on a macro scale, will instead be used on a micro scale to look inside machinery. The use of techniques developed for large structures to document inner workings is an exciting evolution in the field of IA.

(continued on page 16)



Patrick Harshbarger

2016 SIA Student Scholarship Recipients (left to right), Donna Carmichael (University of Birmingham, U.K.), John Arnold (Michigan Technological University), and Maria Franceschino (Istanbul Technical University).

Nathan Holth



12th Street Viaduct.



John Reap

Aging racks at the Rieger Distillery.

through a mail-order business. Its location in Missouri just across the boarder from Kansas offered it an advantage, as Kansas was dry from 1881 until 1949. That company ceased to exist in 1920 with Prohibition, but Andy Rieger, the current co-owner and founder, is a fifth-generation descendant of Jacob Rieger, and he was inspired to resurrect the family business with the current boom in craft distilling. The company operates in a metal building connected to the former Heim Brother's Brewery Bottling Plant in the East Bottoms. Their corn-based whiskey is a blended product that includes some sherry wine. All bottling is done in-house.

Friday Tour 5—Historic Bridges. The Kansas City area is noted for its unusually diverse collection of historic bridges. There are so many, in fact, that visiting them all was well beyond the scope of the SIA Historic Bridge Tour. Instead, the tour included stops at a good representative sample, including the best-known and most significant.

The **Hannibal Bridge** is near the site of the first bridge over the Missouri built in 1869. The current span is a double-deck, through-truss, swing bridge built in 1917.

Originally built to carry highway traffic on the upper deck and railroad traffic below, the bridge today carries only railroad traffic. We were lucky enough to see a train crossing with partially fabricated airplane fuselages. Adjacent to the Hannibal Bridge is the steel-arch **Broadway Bridge** of 1955, which today carries the highway traffic that once used the Hannibal Bridge's upper deck.

The **ASB Bridge**, also over the Missouri, is one of the quintessential surviving works of the celebrated consulting civil engineer J.A.L. Waddell. Built in 1911, it is one of two of the U.S.'s telescoping, vertical-lift bridges, where a lower deck can be raised for boats while traffic continues to cross, unimpeded, on an upper deck. Like the Hannibal Bridge, the ASB Bridge only carries trains today, on the lower deck. The unique telescoping mechanical details remain in place and operational as originally designed. The tour included a worthwhile walk down to a newly installed interpretive center that offers information not just about the historic bridge but the legacy of Waddell, who spent most of his engineering career in Kansas City. An interpretive panel features a diagram showing the numerous consultant engineering firms in operation today that trace their lineage to Waddell and the engineers who were his partners or who worked under his tutelage.

One of the unusual features on a number of Kansas City-area truss bridges is a special jacking system that was installed many decades ago to raise the river spans in the event of a flood. The tour included a stop at one of the bridges having these jacks, the **Highline Bridge**, which is a Baltimore through-truss railroad bridge of 1917.

A break from river bridges came in the form of a stop at the impressive 2,053-ft.-long, double-decked **12th Street Viaduct**. Designed by Waddell & Harrington and built in 1913-1914. This impressive structure is notable as an early example of a large-scale, reinforced-concrete construction. Next was the **Harry S. Truman Bridge**, a railroad through-truss bridge with a traditional tower-based vertical lift design to accommodate river traffic. The railroad line being

(continued on page 17)

John Reap



The German-manufactured Koenig & Bauer AG (KBA) web press at the Kansas City Star printing plant.



SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

PUBLICATIONS OF INTEREST

Vol. 45, No. 3

Summer 2016

COMPILED BY

Mary Habstritt, New York, N.Y. and Patrick Harshbarger, SIAN editor, Wilmington, Del.

GENERAL INTEREST

- ◆ Lawrence Busch. **Standards: Recipes for Reality.** MIT Pr., 2011. 402 pp. \$23. Covers the history of topics like licensing, accreditation, credentialing, and policy as applied to professions and technologies. Argues that these processes are actually far from mundane and play a significant role in shaping contemporary life.
- ◆ Adam Davidson. **Our Town.** *NYT Magazine* (May 1, 2016), pp. 68-75, 81-83. How the industrial jobs of Worcester, Mass., once gave rise to a thriving middle class.
- ◆ **Engineering Heritage Australia**, Vol. 2, No. 2 (Apr. 2016) includes *Steamfest at the National Steam Centre in Scoresby, Vic.* (review); Bruce Cole and Ian Cooper, *Mt. Lyell Abt Rack Railway in Western Tasmania* (conversion of former mining railway of 1892 into a popular tourist attraction); Owen Peake, *Thompsons of Castlemaine* (manufacturing firm that evolved from a grain mill into a producer of mining equipment and pumps); *Carrington Hydraulic Pumping Station, Newcastle* (1870s pumping station at a former coal port). Avail: www.engineersaustralia.org.au.
- ◆ Robert Furman. **Brooklyn Heights: The Rise, Fall and Rebirth of America's First Suburb.** The History Press, 2015. 480 pp., illus. \$29.99. Ties the neighborhood's fortunes to the growth and decline of Brooklyn as a port and distribution center. Rev.: *New York History Blog* (Apr. 10, 2016).
- ◆ Sarah Maslin Nir. **Disparate Visions for a Park: Dismantle Industrial Ruins or Preserve Them.** *NYT* (May 30, 2016). Bushwick Inlet in the Williamsburg section of Brooklyn is a 28-acre industrial site. It is currently occupied by warehouses and the rusting tanks and pipes of the former Bayside Oil Depot. Since 2005, New York City has spent \$198 million to buy various parcels to turn into parkland, but a key piece of the property has yet to be acquired. The Friends of Bushwick Inlet Park has spent nearly two decades advocating for the industrial site to be turned into green space. They are now being challenged by a group of artists and preservationists who want to save elements of the industrial landscape, particularly a cluster of steel tanks. They suggest calling the new park Maker Park instead of Bushwick Inlet Park (www.maker-park.org).
- ◆ Henry Petroski. **To Forgive Design: Understanding Failure.** Belknap Press, 2012. 432 pp. \$27.95. A wide-ranging look at the way engineering failures and catastrophes from the collapse of the Tacoma Narrows Bridge to the Deepwater Horizon drilling rig have shaped engineering practices. Petroski that mistakes, even tragedies, are the price of human ambition and betterment, furthering knowledge by making causes and remedies known. Rev.: *T&C*, Vol. 55, No. 1 (Jan. 2014), p. 249-51.
- ◆ Lowell Thing. **The Street That Built a City: McEntee's Chestnut Street, Kingston, and the Rise of New York.** Black Dome, 2015. 342 pp. The street, located in Kingston, N.Y. about 100 miles upriver of New York City, was home to engineers, manufacturers, and others who supplied the city's building-boom in the 19th century. James McEntee was an engineer who helped build the Delaware & Hudson Canal, which brought coal from Pennsylvania to New York City. Other residents were steamboat magnates, owners of brickyards and quarries, and legendary artists of the Hudson River School. Rev.: *NY History Blog* (Apr. 23, 2016). [NB—book appears to already be out-of-print and expensive to acquire, but perhaps worth checking the library!]
- ◆ **TICCIH Bulletin**, No. 72 (2nd Qtr., 2016) includes Frank Matero, *Pit and Quarry: Pennsylvania's Slate and Cement Landscapes* and Cristina Sucala, *Rebirth of the Petrila Coal Mine*, as well as a round-up of news from industrial heritage sites and happenings around the world. No. 73 (3rd Qtr., 2016) features Patrick Viaene, *Save the Last Coal Processing Plant in Flanders* and Benjamin Hervy, Florente Laroche, Jean-Louis Kerouanton, and Christopher Courtin, *3D Digitisation of Nantes Historic Harbour*. Recent issues of the *TICCIH Bulletin* are available with membership and past issues are available for download at www.ticcih.org.

WATER CONTROL & RECLAMATION

- ◆ Emory Kemp [SIA]. **Taming the Muskingum**. W.Va. Univ. Pr., 2015. 208 pp., illus. \$49.99. The engineering and construction aspects of managing the Muskingum River waterway and fourteen related flood-control dams from Marietta to Dresden, Ohio. Chapters cover early settlement and attempts to navigate the uncontrolled Muskingum, the construction of the slackwater navigation in conjunction with the Ohio & Erie Canal, and the major New Deal project to provide flood control.
- ◆ T. R. Witcher. **San Antonio's River Walk**. CE (April 2016), pp. 46-49. The Texas city's renowned River Walk is only the most visible part of flood control efforts starting in 1925 with construction of the Olmos Dam; two siphon tunnels beneath downtown were added between 1987 and 1996. The riverside walkways opened in 1941 and have since evolved into a tourist attraction and economic development driver.

BUILDINGS & STRUCTURES

- ◆ Daniel A. Barber. **Tomorrow's House: Solar Housing in 1940s America**. T&C, Vol. 55, No. 1 (Jan. 2014), pp. 1-39. Solar house heating was seen as a necessary component of the expansion of the suburbs and was a frequent topic of discussion among modernist architects, but it remained more symbol than reality.
- ◆ Quentin Collette. **Riveted Connections in Historical Metal Structures**. Paper delivered at the 2016 Iron & Steel Preservation Conference, Purdue Univ. Discusses issues related to the inspection, assessment, and

- rehabilitation of riveted structures and supports the use of hot-riveting as an acceptable rehabilitation technique. Available from the author: qcollette@sparksengineering.com.
- ◆ David W. Dunlap. **Pier 57 Goes Down in History as a Place Where Concrete Floats**. NYT (Aug. 8, 2016). Manhattan's Pier 57 is supported by three, buoyant, reinforced-concrete caissons rather than conventional piles. The pier is being redeveloped with new offices and a supermarket (parking garages are to be placed within the caissons, below the waterline), but this article focuses on the history of the pier and its engineer, Emil H. Praeger, who designed it for the NYC Marine & Aviation Dept. in 1952.
- ◆ Tyler J. Kelley. **Building a Collection Brick by Brick**. WSJ, Greater New York (Mar. 14, 2016), p. A1, A25. Profiles several Hudson River Valley brick collectors and the International Brick Collectors Assn.
- ◆ J. Ledley Klosky and Wynn E. Klosky. **Men of Action: French Influence and the Founding of American Civil and Military Engineering**. CH, Vol. 28, No. 3 (2013), pp. 69-87. Traces the origins of formal engineering practice from the influence of French engineers during the American Revolution to the establishment of the Army Corps of Engineers and the U.S. Military Academy at West Point.
- ◆ Robin Middleton. **The First History of Construction? A Memoire by Jean Rondelet**. CH, Vol. 28, No. 3 (2013), pp. 47-68. Analysis of an unpublished essay in the archives of the Avery Library at Columbia University. Written between 1799 and 1802, it is believed to have been the first attempt to write a history of construction, i.e. focused on structure (practices of timber framing, masonry construction, etc.) rather than architectural style. Rondelet (1743-1829), a French architect, went on to publish several other works on the topic.

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Nancy Banks, New York, N.Y.; Marc N. Belanger, Taunton, Mass.; Julie Blair, Houghton, Mich.; Quentin Collette, San Antonio, Tex.; Arlene Collins, Houghton, Mich.; Reese Davis, West Chester, Pa.; Samantha Craig, Boston, Mass.; Helena Dean, San Francisco, Calif.; Dennis Furbush, Jackson Heights, N.Y.; Mary Habstritt, New York, N.Y.; David Hayes, St. Croix, V.I.; Neill Herring, Jesup, Ga.; Nathan Holth, DeWitt, Mich.; Susanna Kuo, Lake Oswego, Ore.; Carol Lockman, Wilmington, Del.; Patrick Malone, Barrington, R.I.; Anita McKelvey, Philadelphia, Pa.; Bill McNiece, Indianapolis, Ind.; Cydney Millstein, Kansas City, Mo.; Steve Muller, Troy, N.Y.; Charles Parrott, Andover, Mass.; Ron Petrie, Lakewood, Ohio; John Reap, Sun City West, Az.; Maryellen Russo, Dripping Springs, Texas; Dan Schneider, Houghton, Mich.; Joe Seely, Chicago, Ill.; David Simmons, Galena, Ohio; Justin M. Spivey, East Windsor, N.J.; Mary Starbuck, Akron, Ohio; Saul Tannenbaum, Cambridge, Mass.; John Teichmoeller, Ellicott City, Md.; Lloyd Tepper, Villanova, Pa.; Tyler Turpin, Richmond, Va.; Robert M. Vogel, Washington, D.C.; Steve Walton, Houghton, Mich.; Jen Watson, Chestnut Hill, Mass.; David Wiesenber, Wooster, Ohio; Suzanne Wray, New York, N.Y.; Helena Wright, Washington, D.C.; Ingrid Wuebber, Trenton, N.J.

With Thanks.

BRIDGES

- ◆ **Covered Bridge Topics**, Vol. 73, No. 3 (Summer 2015) includes *Indiana through the Photographic Eye of Jesse Lunger, Circa 1960* (photo essay); *Williams Bridge, Another Big One in Indiana, New Hampshire's Re-arranged Paddleford Trusses* (Swiftwater Bridge and Stark Bridge), *Greene County, Pennsylvania: Herbert Richter Photos from 1959* (photo essay), and Liu Yan, *Researching China's Wooden Arched Bridges: The Fulfillment of My Academic Dream* (investigation through modeling and assisting Chinese carpenters with full-size reconstructions). Vol. 74, No. 3 (Summer 2016) includes *A Visit to Brown County, Ohio with Harold M. MacKenzie* (photos of bridges taken during trips in 1950 and 1951); *Pony Truss at Clarendon Gorge* (non-extant bridge in Rutland County, Vt.); *Portal Styles in Quebec* (photo essay); *The Burr Truss Is Not a Simple Story* (some of the challenges of designing, building, and analyzing the combination arch and truss); *Lost Covered Bridges in New Brunswick* (bridges lost to floods and fires); and *Big Stranger Creek Bridge, Leavenworth County, Kansas*.
- ◆ Donald Empson and Kathleen Vadnais. **Crossing the St. Croix River: The 45-year Struggle to Build a New**

Stillwater Bridge and Save the Historic Lift Bridge. Self-published, 2015. 70 pp. \$25 plus \$5 p&h. Avail. from Donald Empson, 1206 2nd St. North, Stillwater, MN 55082. Focuses on the lengthy controversy that has surrounded the construction of a new bridge and preservationists' efforts to save the 1931 vertical-lift bridge. The *Stillwater Gazette* (May 16, 2015) reported that a more comprehensive look at the crossing's history has become a matter of dispute between the Minnesota Dept. of Transportation and the local historical society, which has a contract to prepare the volume and is now accusing the DOT of wanting "a feel-good book about the department of transportation instead of a history of the lift bridge." Empson and Vadnais withdrew from the project; their book is not endorsed by the state.

- ◆ Linda Josephson. **Precast Replaces Historic Bridge in Glacier National Park.** *Aspire* (Summer 2015), p. 34. A 5-span bridge, completed in 1930, over Swiftcurrent Lake on the access road to the park hotel, was replaced. Among the aesthetic techniques used to mimic the old bridge was a deeply overhanging deck section and black paint job to give the new bridge the appearance of being shallower than it actually is.
- ◆ Melissa C. Jurgensen. **Through Their Eyes: Covered Bridges of Franklin County, Kentucky.** Due Belli Autrici Books, 2014. 112 pp. \$24.99. Avail. from www.createspace.com. Highlights nine bridges in and around the county, which includes the capital city of Frankfort. Books of similar title have also been published on Bourbon and Harrison counties. Rev.: *CBT* (Summer 2015), p. 6.
- ◆ Bob and Trish Kane. **New York State's Covered Bridges.** Arcadia, 2014. 128 pp. \$21.99. One of many New York covered bridge photo books, this one focuses on historic views of existing bridges. Rev.: *CBT* (Summer 2015), p. 6.

COMMUNICATIONS

- ◆ David Nofre, Mark Priestley, and Gerard Alberts. **When Technology Became Language: The Origins of Linguistic Conception of Computer Programming, 1950-1960.** *T&C*, Vol. 55, No. 1 (Jan. 2014), pp. 40-75. The advent of commercial computers in the 1950s confronted corporations and academic computing centers with an increasing variety of machines. Managers called for the creation of common or universal languages.
- ◆ Huub Wiffjes. **Spellbinding and Crooning: Sound Amplification, Radio, and Political Rhetoric in International Comparative Perspective, 1900-1945.** *T&C*, Vol. 55, No. 1 (Jan. 2014), pp. 148-85. The impact of radio on political rhetoric is explored through sketches of the radio-speaking styles of Churchill, Roosevelt, Hitler, and Dutch politician Hendrikus Colijin. Radio forced a transition from a style that relied on atmosphere and pathos into one that relied on an artificial intimacy using a technique known at the time as "political crooning."

WATER TRANSPORT

- ◆ Ben Boettger. **Old Boat Finds New Birth at Kenai Visitors Center.** *Peninsula Clarion* (Kenai, Alaska). Wooden fishing boat, built in 1929, will be preserved. The Bristol Bay double-ender, so-called because the stern is pointed, was originally wind-powered but later had a gasoline engine added.
- ◆ Walt Bogdanich, Jacqueline Williams, and Ana Graciela Mendez. **Fender Benders on Water? (See: Expanded Panama Canal),** *NYT* (July 30, 2016). Several collisions of massive ships against the walls of the new locks are troubling canal workers and tugboat captains who point to design flaws. Canal engineers deny there is a problem, pointing to pilot and operator errors.
- ◆ Jon Chesto. **New Life Planned for Old Charlestown Rope Factory.** *Boston Globe*, Business Sec. (May 20, 2016). A developer plans to convert the Ropewalk complex at the Charlestown Navy Yard into apartments. Under stiff preservation requirements, the design will incorporate a rope-making museum and preserve machinery and rails of the quarter-mile-long building.
- ◆ Rachele Hampton. **There's a Lot More to This Basque Boat Than Meets the Eye.** *Smithsonian.com* (July 1, 2106). Basque craftsmen reconstructed a 16th-c. whaling boat on the National Mall as part of the Smithsonian's 2016 Folklife Festival. The boat was based on archeological evidence from the 26-ft. *San Juan*, a transoceanic vessel used to carry whale oil from Labrador, Canada, back to Basque country.
- ◆ Mary Carr Mayle. **Barge Delivers First Cargo Up Savannah River in 40 Years.** *Savannah (Ga.) Morning News* (June 18, 2016). A 700,000-lb. syngas converter, used to produce anhydrous ammonia, was delivered by barge to a chemical factory in Augusta, some 200 miles upriver. What made this unusual was that commercial shipping hadn't been seen on the river since the 1970s when Augusta's newsprint and scrap-steel industries stopped shipping by water.
- ◆ Noah Remnick. **Seaworthy and Ready for an Early Unveiling.** *NYT* (May 29, 2016). The 131-year-old, iron-hulled cargo ship *Wavetree* is returning to South St. Seaport after an unexpectedly swift overhaul at Caddell Dry Dock & Repair Co. in Staten Island.
- ◆ Crosbie Smith. **Witnessing Power: John Elder and the Making of the Marine Compound Engine, 1850-1858.** *T&C*, Vol. 55, No. 1 (Jan. 2014), pp. 76-106. Elder, a master engineer from Glasgow, Scotland, persuaded Liverpool's Pacific Steam Navigation Co. of the superior operating characteristics of his compound engine in 1854. A key selling point was the independent investigations of consulting engineer William McNaught, the inventor of a steam-engine performance gauge.

RAILROADS & RAILWAYS

- ◆ Sheldon Gardner. **Old Logs Linked to St. Augustine Rail.** *Florida Times-Union* (July 21, 2016). Construction work on St. Augustine's Malaga Street uncovered a corduroy log roadbed, believed by archeologists to relate to the construction of a local station for Henry Flagler's Florida East Coast Ry. in 1889.

- ◆ Ken Kobus [SIA]. **Pennsy's Pitcairn Yard Decoded.** *The Keystone* (1st Qtr. 2016, Vol. 49, No. 1), pp. 14-62. History of this iconic site east of Pittsburgh. Once a huge classification yard and site of a railcar building and repair facility, it is now mostly derelict. Around 120 well-reproduced and marvelous historical photos and maps, including a double-sided, lift-out, trifold map of the yard in 1923.
- ◆ M. John Lubetkin, ed. **Before Custer: Surveying the Yellowstone, 1872.** Arthur H. Clark (Norman, Okla.), 2015. 326 pp. \$34.95. The Northern Pacific RR sent out two surveying expeditions (eastern and western) in 1872, despite warnings from the Lakota chief Sitting Bull. After a three-month struggle with the Indians, the parties had to turn back. Their failure contributed to the crumbling of Jay Cooke & Co., which triggered the Panic of 1873. Lubetkin covered a subsequent survey in his 2013 book, **Custer and the 1873 Yellowstone Survey.**
- ◆ Kevin Olsen. **Railroads to Jamaica Bay.** *The Keystone*, (1st Qtr. 2016, Vol. 49, No. 1). History of a passenger railroad network in suburban New York originally built to serve beachgoers and sport fishermen that evolved into part of the city's mass transit network serving permanent residents.

AUTOMOBILES & HIGHWAYS

- ◆ Peter Callaghan. **What's Going on with Redevelopment of St. Paul's Ford Plant Site?** *MinnPost* (July 14, 2016); www.minnpost.com. Abandoned automobile plant (tour site—2013 SIA Annual Conference) is on a slow-moving track for redevelopment as mixed-use residential and commercial property. Initial environmental investigations have not identified any major concerns for remediation.
- ◆ Henry Petroski. **The Road Taken: The History and Future of America's Infrastructure.** Bloomsbury, 2016. 322 pp., illus. \$28. Petroski makes a case for the value of experimental and incremental improvements to bridges and roadways and discusses the shortfalls of megaprojects like the new eastern span of the San Francisco-Oakland Bay Bridge. *Rev.: NYT Book Review* (Mar. 20, 2016), p. 14.

AERONAUTICS & AEROSPACE

- ◆ Bruce Dearstyne. **Making Aviation History on Independence Day, 1908.** *The New York History Blog* (July 4, 2016), www.newyorkhistoryblog.org. New York aviation pioneer Glenn Curtis (1878-1930) made "the first pre-announced, publicly-witnessed, officially certified flight of an airplane in the U.S." The flight of the "June Bug" took place in front of a crowd at a racetrack near Hammondsport, N.Y. It lasted 1 min. 40 sec. and covered 1.6 km.

POWER GENERATION

- ◆ Shaun Pett. **A Power Plant Reborn as a Red-Hot Engine of Creative Pluck.** *NYT* (June 13, 2016), p. C5. Toronto's Hearn Generating Station is transformed for

the 2016 Luminato Festival of arts but the future of the plant, decommissioned in 1983, is cloudy.

- ◆ Roff Smith. **Nikola Tesla's Struggle to Remain Relevant.** *Smithsonian Journeys Travel Quarterly Danube Issue* (Apr. 25, 2016). Features Belgrade's Nikola Tesla Museum as the largest repository of Tesla memorabilia in the world.
- ◆ Michael Tanenbaum. **Fishtown's PECO Delaware Station Nominated for Historic Register.** *Philly Voice* (June 15, 2016), www.phillyvoice.com. The former Philadelphia Electric Co. power plant, in operation from 1917 to 2004, was nominated to the Philadelphia Register of Historic Places. The Classical Revival-style station was designed by John T. Windrim and William Eglin. The station was purchased last year by developers who plan to convert the building into an event space with restaurants, a banquet hall, and guest rooms.
- ◆ Joel A. Tarr. **Toxic Legacy: The Environmental Impact of the Manufactured Gas Industry in the United States.** *T&C*, Vol. 55, No. 1 (Jan. 2014), pp. 107-47. Explores the impacts of the industry on the quality of air, land, and water from 1850 to 1950, as well as the attempts by government to regulate pollution.
- ◆ T. R. Witcher. **Michigan's Upper Peninsula: A Nexus of Engineering Prowess.** *CE* (May 2016), pp. 44-47. In describing the power canal, 79-turbine hydroelectric plant, and multiple structural retrofits of the powerhouse building at Sault Ste. Marie, this article makes frequent mention of HAER documentation written by Terry S. Reynolds [SIA].
- ◆ **Windmillers' Gazette**, Vol. 35, No. 3 (Summer 2016) includes T. Lindsay Baker, *Flint and Walling, Inc. Celebrates Sesquicentennial* (Kendallville, Ind. manufacturer of the Star line of windmills continues in business); and Samuel Porcello, *Windmills and Railroads: A Successful Partnership* (windmills as critical for pumping water to steam locomotives operating across the Great Plains). Quarterly \$20/yr. Christopher Gillis, P.O. Box 788, Buckeystown, MD 21717.

ARMS & AMMUNITION

- ◆ Kate Brown. **Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters.** Oxford Univ. Pr., 2013. 416 pp. \$21.95. Comparative histories of two Soviet and American plutonium-making facilities: in Ozersk in the southern Urals and Hanford, Wash. The author finds many parallels including communities that shared 1950s values of militarism, racism, sexism, and a disregard of long-term impacts of radiation. *Rev.:T&C*, Vol. 55, No. 1 (Jan. 2014), pp. 269-70.

GLASS & GLASSMAKING

- ◆ Eve M. Kahn. **A New Glass Museum Will Open in a Historic Factory.** *NYT* (June 16, 2016). The Dorflinger glassworks operated in White Mills, Pa. from the 1860s to 1921. The Dorflinger Glass Museum, part of the Dorflinger-Suydam Wildlife Sanctuary, has been open since 1989 and features galleries with over 1,000 pieces

of glass (www.dorflinger.com). A new museum opened nearby in July 2016. Its name is the Dorflinger Factory Museum Arts Center located in a former factory office (www.dorflingerfactorymuseum.org). Built in 1888, the office is a beautiful example of Pennsylvania cut bluestone construction. The first floor features displays of the factory's history and the second floor contains the restored showroom.

TEXTILES

- ◆ Damon Cline. **Data Center Plans Announced for Historic Sibley Mill.** *Augusta (Ga.) Chronicle* (May 4, 2016). The Sibley Mill, a Gothic-Revival brick factory complex of 1882, has been vacant since 2010. The Augusta Canal Authority, which owns the mill, will partner with a South African technology company to redevelop the mill for use as a data center and technology park.
- ◆ Ernie Garcia. **Yonkers Approves Artisan District.** [*Lower Hudson River*] *Journal News* (Mar. 27, 2016), p. 5A; www.lowhud.com. City Council of Yonkers, N.Y. approved new zoning for the former Alexander Smith Carpet Mills to allow retail and office uses in up to 20% of the massive complex. The buildings date to the late-19th century and produced carpets until 1954.
- ◆ Steven Kurutz. **The Sock Queen of Alabama.** *NYT* (Mar. 31, 2016), pp. D1, D8. How Gina Locklear revived her family's textile factory, one of the only sock mills still operating in Fort Payne, Ala., once the "Sock Capital of the World" with 120 mills and 7,500 workers at its peak.

AGRICULTURE & FOOD PROCESSING

- ◆ Lynn Freehill-Maye. **The Trouble with Owning a Grain Elevator.** *New Yorker* (July 31, 2016). Finding new uses for a grain elevator is hard, even with increased appreciation for the silos as potential cultural hubs.
- ◆ Randy Kennedy. **Crystal Bridges Museum to Open New Space for Contemporary Art.** A former 1940s Kraft cheese factory is to be turned into a contemporary art museum by the Walton family in Bentonville, Ark., home of Walmart. *NYT* (Mar. 30, 2016), p. C1.
- ◆ Kristen Oliver. **Stakeholders Examine Artifacts from Healan's Mill Excavation.** *Gainesville (Ga.) Times* (May 12, 2016). Grist mill of 1852 is being investigated with hopes for eventual restoration.

LUMBERING & WOOD PRODUCTS

- ◆ Mark Kurlansky. **Paper: Paging Through History.** Norton: 2016. 389 pp., illus. \$27.95. The author of *Cod* and *Salt* turns his attention to another everyday product with this survey of the development and manufacture of paper and its essential contribution to cultural transmission. *Rev.*: *NYT Book Review* (May 22, 2016), p. 12.
- ◆ Jay O'Hern. **Adirondack Logging: Life and Times in the Early Years of Logging's Mechanization.** Versa Pr., 2016. \$28.99. Avail: www.adkwilds.com. Portrays lumberjacks in the 1920s when "old-style horse-drawn methods"

were replaced by Linn tractors and other mechanized harvesting machinery. Includes interviews with loggers, descriptions of lumber-camp life and cuisine, river drives, and evangelicals who brought the Christian faith to back-country camps.

OIL & PETROCHEMICALS

- ◆ Doug Hennes. **That Great Heart: The Life of I. A. O'Shaughnessy, Oilman and Philanthropist.** Beaver's Pond Pr. (Edina, Minn.), 2014. 259 pp. \$25. Biography of Minnesotan Ignatius O'Shaughnessy, founder of Globe Oil & Refining Co., covers major events of his life and emphasizes his financial gifts to Catholic institutions.

IRON & STEEL

- ◆ Tyler H. Jones. **Hidden History Uncovered.** *LaGrange (Ga.) Daily News* (July 6, 2016). Archeologists from Kennesaw State University are excavating an 1820s blacksmith shop and a cabin, possibly a slave dwelling, near Troup Factory, a later textile mill site.

MISC. INDUSTRIES

- ◆ Margaret Guroff. **The Mechanical Horse: How the Bicycle Reshaped American Life.** Univ. of Texas Pr., 2016. 295 pp. \$24.95. How the physical mobility offered by the bicycle influenced everyday life, from improved roads to the way people exercise and dress. *Rev.*: *WSJ* (Apr. 8, 2016).

ABBREVIATIONS:

- CBT = *Covered Bridge Topics*, published quarterly by the National Society for the Preservation of Covered Bridges. Available with membership: www.coveredbridgesociety.org
- CE = *Civil Engineering*, published by the American Society of Civil Engineers
- The Keystone* is published by the Pennsylvania Railroad Technical and Historical Society
- NYT = *New York Times*
- T&C = *Technology & Culture*, published by the Society for the History of Technology
- TICCIH = *The International Committee for the Conservation of the Industrial Heritage*, www.mnactec.com/ticcih
- WSJ = *Wall Street Journal*

Publications of Interest is compiled from books and articles brought to our attention by you, the reader. SIA members are encouraged to send citations of new and recent books and articles, 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 SIA Newsletter, 305 Rodman Road, Wilmington, DE 19809; phsianews@aol.com.

Duncan emphasized that in both cases, SIA is a partner with other organizations and not the only one providing funding. Anyone who knows of innovative projects that document and preserve industrial heritage should let incoming chair Paul White know.

Student Scholarships. Scott See reported on behalf of committee chair Alicia Valentino and fellow committee members Patrick Harshbarger and Gerry Weinstein. Each year, SIA awards travel scholarships to offset the expense of attending the conference. The scholarships are funded through a dedicated account that relies on donations and voluntary contributions from members when they renew their membership dues. This year, through members' generosity, SIA was able to award three scholarships in the amount of \$800 each. Scott then recognized the three winners of this year's scholarships: John Arnold (MTU), Donna Carmichael (University of Birmingham, U.K.), and Maria Franceschino (Istanbul Technical University).

Upcoming Events. Events Coordinator Julie Blair announced that the 2016 Fall Tour will be held in the Fox River Valley of Wisconsin and headquartered in the Green Bay-DePere area. The tour is scheduled for Oct. 28-30 and will include an opening reception at the National Railroad Museum and visits to the Little Chute lock and canal, the Burger Boat Co., and a hydroelectric generating station. T. Arron Kotlensky has stepped up to be the organizer for the next Annual Conference in the Houston-Galveston area, May 18-21, 2017. More details are forthcoming.

Julie reminded members that we always need local organizations to host events. Systems are in place to support local groups; it is a lot of hard work, but also a lot of fun. She thanked Cydney Millstein, who opened doors, knocked on them, and even kicked in a few to get SIA into so many great places during the current annual conference. She also thanked the many volunteers and contributors who made this a successful event.

Local Chapters. President Gronhovd led the traditional

standing roll call of local chapter members, which included a new chapter, the Great Northern Chapter. Based in Minneapolis and covering the upper Midwest, the chapter was recently established and officially recognized by the Board.

Vogel Prize. David Simmons read the Vogel Prize citation and presented the award to Sean Gohman (see article elsewhere in this issue).

General Tools Award. Chuck Parrott read the General Tools Award citation and presented the award to Duncan Hay (see article elsewhere in this issue).

Nominations Committee. President Gronhovd recognized departing officers: Past President Duncan Hay, Secretary Justin M. Spivey, Nominations Committee chair Lynn Rakos, and Directors Richard K. Anderson, Jr., and Ann Dichter.

Lynn Rakos reported that it had been quite a challenge to recruit candidates for two open Director positions, Vice President, and Secretary. Current Vice President Maryellen Russo agreed to run for President but could not attend the conference, and long-term Treasurer Nanci K. Batchelor graciously agreed to run again. Lynn thanked the Board for appointing Mary Habstritt to fill a vacancy on the Nominations Committee. This was the first year without Don Durfee to keep the committee on track, but Julie Blair stepped in to ensure that ballots were mailed on time. She thanked *ex officio* committee member Duncan Hay, who kept things calm and provided sage advice, and fellow committee member Bill Vermes.

She also thanked outgoing Board members; not only for their service, but also for being willing to serve when they first ran. Members willing to serve keep the Society running, and Lynn encouraged those in attendance at the conference, as well as those reading the newsletter at home, to nominate themselves or approach the Nominations Committee.

She thanked this year's candidates, all of whom seemed willing to run without arm-twisting, and announced the results: Michael S. Raber for the Nominations Committee,

(continued on page 20)

Welcome Dan Schneider SIA Headquarters Office Manager

Daniel Schneider recently began work as the new office manager at SIA headquarters. Schneider is a 2016 graduate of the Industrial Archaeology master's program at Michigan Tech. His research focuses on manufacturing machinery and manual engagement. His own engagement with machines occurs primarily within his practice as a book artist, including linotype operation, letterpress printing, and hand bookbinding. As the SIA's office manager, Schneider answers questions from the SIA membership, handles membership renewals, helps with event registration and publication distribution, updates the Society's website and does other work of similar nature. Most weeks, he will be in the headquarters office on Mondays, Tuesdays, and Wednesdays.



Daniel Schneider, SIA HQ Office Manager

important to the WWII effort, this bridge is one of the few steel bridges built during the war. It has a surprisingly contemporary appearance, with solid-looking towers and trusses lacking the lacing and lattice found on earlier truss bridges.

The last bridge of the day was the **Waddell A-frame Bridge** of 1898. The A-frame was a unique design of J.A.L. Waddell, with only a couple of examples surviving today. It is noted for its triangular kingpost-like shape, which was promoted by Waddell to be very rigid and ideal for railroad use. This particular example has been moved and preserved for pedestrian use in English Landing Park in Parkville. Tour attendees enjoyed exploring this bridge and spent a fair amount of time trying to figure out the reasoning behind some of the unusual details of its truss design.

Friday Night Film Festival. This 6th annual event was held in the Arthur Stillwell Room of Union Station. Bob Stewart [SIA] served as host, offering a series of vintage shorts that covered a range of IA topics, from manufacturing at Westinghouse (c. 1904, no sound) to the making of the space shuttle's main engine nozzle at the Pacific Furnace. A special thanks to Richard Welnowski for setting up the computers!

Saturday Evening Banquet. The banquet was held in the **Belger Crane Yards Studio**, a former paper envelope factory (originally the Berkowitz company; see above for history) that later became a storage warehouse for cable. It now serves as a major arts center and studio space. Dozens of artists work and display here, and several of the resident artists were on hand to discuss their work.

Sunday Tour 1—Fort Leavenworth is a U.S. Army fort located on the Kansas side of the Missouri River, 25 miles northwest of Kansas City. The tour was led by Col. Roderick Cox, Program Director of the Simons Center at Fort Leavenworth; Kelvin Crow, Command Historian of Fort Leavenworth; and Mary Ann Warfield from Architectural & Historical Research, LLC. Built in 1827, Fort Leavenworth is the oldest active army post west of Washington, D.C. It was granted National Historic Landmark status in 1960.

Our first stop was the Buffalo Soldier Monument, which honors the black cavalry units that existed from 1866 to 1946. Fort Leavenworth was the eastern terminus of the Santa Fe and Oregon trails. We explored the trailhead near the river landing where wagon ruts are still visible. The fort became the site of a military prison in 1874. The prisoners quarried the stone, made the bricks, and built the prison and the other buildings. A disciplinary barracks replaced the prison in 2002.

We passed Fort Leavenworth National Cemetery, where pioneers who died along the trails and the unknown dead from abandoned frontier outposts were sent back for a “civilized” burial and to lie alongside our nation’s servicemen and women. Today, the primary mission of Fort Leavenworth is educational. We toured the Combined Arms Center, a training institute where seasoned officers, including those from other nations, receive an advanced military education that prepares them for leadership roles, and a think tank that is “engaged in the primary mission of preparing the Army and its leaders for war.”

Sunday Tour 2—River Tour. High water in the Missouri from overnight storms had deposited a deep layer of mud at the landing where this tour was scheduled to launch. This prevented our canopied motorboat, which could hold about 16 individuals, from picking our group up at the designated boat ramp but, not to be deterred, our tour leaders improvised and had us bus downriver to another location, take a walking tour of some of the same bridges that were on Friday’s Bridge Tour 5, and then board the boat once it was able to catch up to us. This allowed us eventually to see a stretch of the Missouri from downtown Kansas City upriver to the confluence with the Kansas at a location known as the Point, which was one of Lewis & Clark’s campsites.

Our river guides were staff and volunteers from Healthy River Partnership, a group that advocates in the interest of water ecology and offers educational programs. The onboard narration was thus a mix of learning about the riverine environment from some very knowledgeable environmentalists,

(continued on page 22)



Patrick Hansharger

SIA group at the main entrance to Tension Envelope.



John Reap

Starch processing room at Faultless Starch.

IA ON THE NATIONAL REGISTER

The following is a compilation of industrial heritage and related sites added to the National Register of Historic Places (U.S.) from Mar. 28 to July 1, 2016.

American Brewing Co. Plant, Providence, R.I. Built in 1892, the brick brewery in a massive German Romanesque style was designed by Adam C. Wagner, a Philadelphia-based architect and brewery engineer.

Appleton Woolen Mills, Appleton, Wis. Industrial complex constructed between 1881 and 1962. In its early years, the mills spun yarns, but by 1902 they were producing paper-makers' felt, used in the shaping of pulp into continuous sheets of paper in nearby paper mills.

Automobile Alley Historic District, Mobile, Ala. Downtown Mobile's St. Louis Street was a center of automobile sales and service starting in the 1920s. Former Buick and Dodge Brothers dealerships anchor the district.

Bridge at 13th Street, St. Francisville, Ill. Railroad overpass of 1909, combination timber and steel stringer.

Bridge No. L7075, Browerville, Minn. Also known as Hartford Stone Bridge, a 3-span, multi-plate, steel arch with granite spandrels. Constructed by the WPA, c. 1940.

C. A. Murdock Mfg. Co. Building, Kansas City, Mo. Romanesque Revival-style, 5-story industrial building of 1887. Murdock produced and distributed coffee, tea, and spices.

Camden & Amboy RR Right-of-Way Site, Hightstown, N.J. Abandoned section of the 1830s railway features *in situ* stone sleepers.

Campbell Baking Co., Waterloo, Iowa. Single-story, brick, commercial bakery of 1927.

Campbell-Continental Baking Co. Building, Kansas City, Mo. Commercial bakery of 1915 that specialized in biscuits and crackers.

Cheek-Neal Coffee Co. Building, Houston, Texas. Roasting plant and warehouse of 1917.

Columbia Turnpike East Tollhouse, Hillsdale, N.Y. This two-story, side-gabled, vernacular building served as the easternmost tollhouse from the 1830s to the turnpike's demise in 1907.

Crescent Corset Co., Cortland, N.Y. A daylight factory building of 1923 began as the manufacturing site of J.C. Penney Co.'s private-label "Lady Like" corsets.

Duluth Harbor North Pier Light, Duluth, Minn. Lighthouse of 1910 features a 37-ft.-tall conical, steel tower. Listed under Light Stations of the U.S. Multiple Property Submission (MPS).

Duluth Harbor South Breakwater Outer Light, Duluth, Minn. Lighthouse of 1901 features a fog-signal building and two-story, brick light tower. Listed under Light Stations of the U.S. MPS.

Edmond Ice Co., Edmond, Okla. From 1909 to 1944, this complex of buildings manufactured ice and distributed butter, ice cream, and soda.

Electric Transformer House, Oklahoma City, Okla. Small, one-story, brick, transformer house was built around 1911 by Oklahoma Gas & Electric.

Falcon Field WWII Aviation Hangars, Mesa, Az. Field opened in 1941 to train British and U.S. pilots. Two hangars survive. Became a municipal airport in 1948.

Ferd. Heim Brewing Co. Bottling Plant, Kansas City, Mo. Located in the East Bottoms, the brick bottling plant opened in 1907 and closed with Prohibition in 1920.

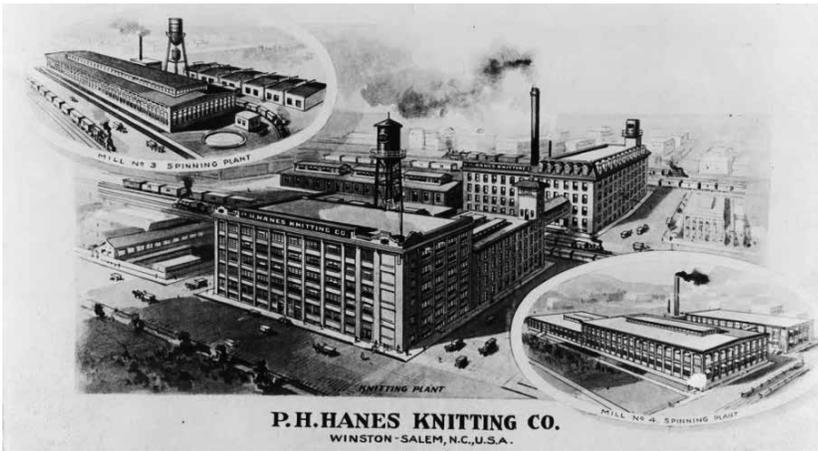
Fitch Bros. Bluestone Co. Office, Kingston, N.Y. Built in 1870, the Second Empire-style building constructed of bluestone served as the headquarters of a local quarrying business that employed over a thousand men at its height.

Hanes Hosiery Mill, Ivy Avenue Complex, Winston-Salem, N.C. The Ivy Avenue plant opened in 1925 and was expanded five times, including the addition of a finishing mill in 1939, designed by Albert Kahn. By 1955, the main factory building encompassed 630,000 sq. ft., which Hanes claimed was the "largest hosiery manufacturer under one roof."



Fitch Bros. Bluestone Co. Office, Kingston, N.Y.

Daniel Case, Wikimedia Commons



Hanes Hosiery Mill Complex, Winston-Salem, N.C. Undated bird's eye view.

Kahului RR Administration Building, Kahului, Hawaii. Classical Revival-style, reinforced-concrete office building of 1924.

Lowney Chocolate Factory, Mansfield, Mass. Complex of factory buildings constructed between 1903 and 1987. Originally based in Boston, the Walter Lowney Chocolate Co. became known in the 1880s for its bonbons and other prepackaged candies.

Maas & McAndrew Co. Building, Rochester, Minn. Small, 2-story, brick garment factory of 1900.

Manning Water Tower, Manning, Iowa. In service by 1903, the riveted steel water tower was designed by civil engineer Henry Brunnier as an undergraduate at the University of Iowa. Brunnier went on to a distinguished career, including working on the design of the San Francisco-Oakland Bay Bridge.

McLeod & Smith Inc. Headquarters, Minneapolis, Minn. Warehouse and factory complex with two multi-story buildings built in 1897 and 1909. McLeod & Smith was one of the earliest, largest, and most successful furniture manufacturers in Minneapolis.

Miller Brothers Cotton Warehouse, Columbia, S.C. Brick warehouse of c. 1872 was among the first commercial warehouses constructed in Columbia after the Civil War.

Norris Hydroelectric Project, Norris, Tenn. Norris Dam was the first major project of the TVA. Construction of the 265-ft.-tall, Modernist-style dam was completed in 1936. Listed under the TVA Hydroelectric System, 1933-1979, MPS.

O. D. Gunn Sale & Trade Barn, Quitman, Ark. Transverse-crib barn used for livestock sales since 1910.

Ogdensburg Harbor Lighthouse, Ogdensburg, N.Y. Lighthouse of 1900 features a stone tower and attached keeper's house. Located on the St. Lawrence River.

Presque Isle Harbor Breakwater Light, Marquette, Mich. Located at the harbor's entry since 1941. Listed under Light Stations of the U.S. MPS.

Register and Tribune Building, Des Moines, Iowa. Newspaper office and printing complex of 1918.

Senator Shipwreck, Port Washington, Wis. Steam-screw freighter, launched in 1896 and sunk in 1929 with a cargo of 241 new Nash autos. Listed under Great Lakes Shipwreck Sites of Wisconsin MPS.

Shields' Mill Covered Bridge, Brownstown, Ind. This two-span, 345-ft.-long, multiple-kingpost, double-Burr-arch, through truss was erected in 1876.

Studebaker Corp. Branch Office Building, Des Moines, Iowa. Three-story, brick commercial building of 1918 was used as a district office and distribution point for Studebaker automobiles.

Southern Ry. Building, Washington, D.C. Eleven-story, Classical Revival-style, downtown, executive office building of 1928-29 was designed by architect Waddy B. Wood.

Union Station, Walpole, Mass. Late Victorian-style station of 1893 served the New York & New England RR and the New York, New Haven & Hartford RR.

USS Conestoga Shipwreck, San Francisco, Calif. Ocean-going tug was commissioned in 1917 and disappeared mysteriously in 1921 en route to American Samoa. It was recently found off the coast of San Francisco.

Walnut Ridge Army Airfield Access Road, College City, Ark. Two-lane, concrete highway constructed under the National Defense Highway Act of 1941.

Western Electric Co., Tarheel Army Missile Plant, Burlington, N.C. Industrial complex encompasses 15 buildings constructed between 1928 and 1978. Opened in 1928 as the A. M. Johnson Rayon Mills, the plant was jointly occupied by the Fairchild Engine & Airplane Corp. and Firestone Rubber during WWII. Western Electric leased the facility at war's end, using it to construct radio transmitters and later guided missile systems.

X-100, San Mateo, Calif. The X-100 is a steel-structure, single-family Modernist residence built by Eichler Homes in 1956. The house was promoted as futuristic due its open plan and glass walls, which emphasized a connection to the outdoors.

IA on the National Register is compiled from the National Register Weekly List supplemented by information gleaned from other sources. ■

IA ON THE WEB

120 Years of Electronic Music (www.120years.net). This extensive website covers the history of electronic music with a timeline and in-depth articles, including one on Thaddeus Cahill's Telharmonium of 1897, which is considered the first significant electronic instrument and was used to distribute music over telephone networks.

Boynnton Bicycle Ry. (www.robertkopolovicz.com/boynnton.html). Curious history of a steam-powered monorail system of the 1890s that was inspired by bicycle technology and achieved a speed of 60 mph. The experimental track was located at Brighton Beach, N.Y.

Dismantling a Skyscraper Japanese Style (www.chonday.com/videos/skudrejapan4). Documentary video describes the method that engineers used to dismantle a 150m-high skyscraper by lowering it 6m per week. The approach, which has the advantage of no noise or air pollution, involves a frame surrounding the top of the building within which workers remove walls and interior supports.

The First World War: Britain's Surviving Vessels (www.w1britainsurvivingvessels.org.uk). More than 60 surviving ships that participated in the war are featured on this website maintained by National Historic Ships UK. Clicking on a location map brings up a history of each ship and a current photograph. The site also includes a timeline and thematic essays.

How Do They Knit a Chain Link Fence? (www.youtube.com, search on title). Un-narrated video follows the step-by-step machine processes in knitting a vinyl-coated, chain-link fence. Good as a plant tour. Produced by the National Film Board of Canada (1998).

Kirkaldy Testing Museum (www.testingmuseum.org.uk). This Victorian testing and experimental works was a family business for almost 100 years and was used to set international standards for the construction industry. The centerpiece of the collection is David Kirkaldy's Universal Testing Machine, a hydraulic tensile tester with a designed

load capacity of 500 U.S. tons. The website offers historical background, photographs of testing machines, and information on visiting the London museum.

Oregon Iron Chronicles (www.oregonironchronicles.com). A compilation of newspaper articles published between 1860 and 1930 concerning the Oregon iron industry. The focus is on Oswego, where the Oregon Iron Co. opened the first iron mines and furnaces on the Pacific Coast in 1865 (SIAN, Spring 2012). The iron works remained in operation as the Oswego Iron Co. (1877-1882) and the Oregon Iron & Steel Co. (1882-1929). The website was developed as a tool for researchers by Susanna Kuo [SIA].

SAH Archipedia (www.sah-archipedia.org) aims to be an authoritative on-line encyclopedia of the built world, containing histories, photographs, and maps of thousands of buildings and structures. A project of the Society of Architectural Historians, there is both selected free content and more in-depth content available with membership.

S.S. Badger, How She Works (www.facebook.com/ssbadger, select videos and search for title). Due to safety regulations, the public is not allowed to visit the engine room and pilot house of the S.S. *Badger*, the last coal-fired, steam-powered Great Lakes car ferry and a National Historic Landmark. To address the curiosity of passengers, the ferry now features a 14-min., high-definition video, which is also available through the ferry's Facebook page.

Streit's: Matzo and the American Dream (www.imdb.com, search on title, \$3.99 to view on-line through Amazon) is a documentary film about a family-owned matzo bakery, a fixture of Manhattan's Lower East Side for nearly 90 years until recently purchased by a developer who will reportedly build condos. Historical clips and interviews with former employees. Rev.: NYT (Apr. 19, 2016).

"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: phsianews@aol.com. ■

MINUTES *(continued from page 16)*

Paul White and Suzanne Wray for Directors, James Bouchard for Secretary, Nanci K. Batchelor for Treasurer, Christopher H. Marston for Vice President, and Maryellen Russo for President.

Lynn thanked those who ran, and encouraged those who didn't win to consider running again, before inviting Vice President Christopher Marston to the podium. Christopher noted that he was humbled to be elected and looked forward to working with everyone. As his first duty, he thanked

President Gronhovd for her support and service over her past two years as President, congratulated her for doing a great job, and said he was looking forward to working with her and Maryellen Russo as a three-member team leading SIA.

Adjournment. With no new business forthcoming, President Gronhovd adjourned the meeting at 1:43 pm (CT).

*Respectfully submitted,
Justin M. Spivey, Secretary*

NOTES & QUERIES

Cultural Landscape Information Exchange. US/ICOMOS has launched the U.S. Cultural Landscapes International Community of Knowledge or “US/CLICK”. This web-based knowledge-sharing platform is designed to offer tools for U.S. practitioners of cultural landscape documentation and preservation to share their knowledge with an international community. Content includes research, publications, international news, and conferences. For example, a recent article looked at how both Eastern Market in Detroit and a horse-powered grist mill in Serbia have expanded community access to fresh food. Info: www.usicomos.org/knowledgeexchange.—*Living Landscape Observer* (May 2016)

The **Archaeological Institute of America’s Site Preservation Grants** fund projects that preserve and promote the world’s archeological heritage. Grants carry a maximum value of \$25,000. The AIA targets projects that directly preserve archaeological sites as well as those that promote outreach, education, and best practices to positively impact local communities, students, and the discipline of archeology as a whole. The next application deadline is Oct. 15, 2016. For more information or to submit an inquiry, <http://archaeological.org/grants/706>. To learn about past winners, visit the projects page at <http://archaeological.org/sitepreservation/projects>.

The Hagley Museum & Library (Wilmington, Del.) has opened the **Pennsylvania Water & Power Co. presidential records** to researchers. PW&P was formed in 1910 to finish construction of the Holtwood hydroelectric facility on the Susquehanna River. The company helped bring about the electrification of Baltimore and the surrounding region. Records cover a wide range of topics including operations, customers, and dam construction.—*Hagley Collections and Research News* (July 2016)

Applications are being accepted for **National Endowment for the Humanities (NEH)-Hagley Postdoctoral Fellowships** at the Center for the History of Business, Technology, and Society at the Hagley Museum & Library. These new fellowships are open to scholars who are U.S. citizens, or foreign nationals who have been living in the U.S. for three years, and who have received their doctoral degrees by the application deadline. Two fellowships are available: one of four months and one for eight months. The fellowships consist of a monthly stipend of \$4,200, complimentary lodging, office space, and access to research collections. Applications are due Dec. 1, 2016. Info: Carol Lockman, clockman@Hagley.org. ■

SITES & STRUCTURES

The Virginia Historical Highway Marker program recently recognized two early-20th-century railroad towns. The **Norge Depot** in James City County was built by the C&O RR in 1907-08 to serve a community of Scandinavian immigrants and the shipment of their agricultural products. The depot, relocated about one-half-mile north of its original location, has been preserved. The village of **Stokesville**, established in 1901, became a boomtown after the Chesapeake Western Ry. extended there in 1902. Lumber mills, bark tanneries, a stave and heading factory, and other enterprises were attracted by the access to timber in the nearby mountains. Population peaked at 1,500 in 1905 and then declined as the area’s timber supply dwindled. A flood in 1949 destroyed most of the remaining buildings.—*Va. Dept. of Historic Resources, Press Release* (Apr. 4, 2016)

Virginia has also added an impressive number of industrial heritage properties to the Virginia Landmarks Register. These included the 147-ft.-tall **Manassas Water Tower** of 1914, the oldest surviving public water tower in northern Virginia; the **Brightwells Mills Complex**, a grist mill that operated from 1826 to 1965 in Amherst County; two historic districts (HDs) around Richmond Southside tobacco warehouses—the **American Tobacco Co. South Richmond Complex**, which was established in 1911, and the **Blair Tobacco Warehouse**, which was constructed in 1939; the **Fort Belvoir Military RR Historic Corridor** in Fairfax County, consisting of a WWI-era corridor with 5.5 miles of sidings and associated buildings; and Lexington’s **Jordan Point HD**, served by turnpike, canal, and railroad prior to the Civil War and hosting archeological remains of a dock and canal, merchant mill, cotton mill, tilt-hammer shop, and other industrial buildings.—*Va. Dept. of Historic Resources, Press Release* (June 22, 2016) ■

CORRECTION

SIAN (Winter 2016) reported that the S.S. *Columbia* had been towed to Kingston, N.Y. from Detroit, but in fact she only made it as far as Buffalo and never crossed upstate via the Barge Canal. The steamer of 1902 had been in Toledo for hull work but had to move as quickly as possible to New York State to fulfill promises made when she was awarded a state preservation grant. More work is being done in Buffalo with the goal of some day offering steam excursions on the Hudson River.

along with a chance to see some IA sites, particularly bridges and the small Port of Kansas City from the river. Despite the river being high and muddy, the weather was sunny and clear, making it a perfect way to spend a Sunday morning.

Sunday Tour 3—Library District. Cydney Millstein led this architectural walking tour of the downtown Library Historic District beginning with a ride on the new **Kansas City Streetcar**, which runs along a 2-mile route between the River Market and Union Station. The Library District is comprised of 22 commercial buildings, dating from 1881 to 1950, in the vicinity of the Central Branch of the Kansas City Public Library at West 10th Street and Baltimore Avenue. The architectural vocabulary of these buildings ranges from high-style designs spanning Neo-Classicism through Modernism, to classic two and three-part vertical blocks with conformity in articulation, size, and scale. Particularly striking is the façade of the parking garage for the Central Branch. It is covered in signboard Mylar that is printed to appear as a row of books upon a shelf, although these books are 25-ft. high and 9-ft. wide!

Sunday Tour 4—Freight House District. Brad Wolf, Administrator of the Landmarks Commission of Kansas City, led a walking tour that began at the 1914 **Union Station** with a walk past historical images of the station. Originally with 16 through tracks, the building contains 900 rooms within its 850,000 sq. ft. The main lobby has its original paint scheme and can hold as many as 10,000

people for events. The station continues to serve six trains daily (two on Amtrak's Chicago-Los Angeles service and four Kansas City-St. Louis).

Walking through the station, we crossed the two truss spans of a railroad bridge that originally carried the Consolidated Terminal Ry. between the East and West Bottoms. The Pencoyd-built bridge was moved to its current site in 2006 to carry pedestrians over the tracks between Union Station and the Freight House District. It provides a great view of train traffic approaching and leaving Union Station.

The **Freight House** was constructed for the Chicago, Milwaukee & St. Paul RR in 1887. It now anchors a National Register-listed district that includes some 21 properties, mostly former factories and warehouses, dating from 1887 to 1958. Many are of reinforced-concrete frame construction designed for small manufacturing and originally served by a railroad spur. The district also includes some hotels built near Union Station that were used primarily by traveling businessmen.

Our walk then took us north and west of Union Station in an area known as Film Row. Many buildings in this area originally served movie distributors that catered to the needs of small-town theaters. Most of the buildings we passed have been reused for residences or for small businesses.

With contributions by Nathan Holth, Bill McNiece, John Reap, Mary Starbuck, and Ingrid Wuebber ■

CONFERENCES & WORKSHOPS

Conversations Northeast is a conference about railroad photography and art in the northeastern U.S. jointly hosted by the Center for Railroad Photography & Art and the Archives & Special Collections of the University of Connecticut. The full-day conference will be held on Oct. 29, 2016 at the Thomas J. Dodd Research Center at the University of Connecticut in Storrs. The archives at UConn Library contains some 100,000 railroad images, a selection of which will be on exhibit. Presenters include Matt Kierstead [SIA] who will talk about the book *Stations* by artist Michael Flanagan. Other presenters include well-known railroad photographers Jim Shaughnessy, Victor Hand, J. W. "Jack" Swanberg, Howard Pincus, and Shaun O'Boyle. Mark Aldrich, a retired economics professor at Smith College, will discuss his collection of railroad-themed political cartoons. Registration of \$95 includes continental breakfast, lunch, and reception. Info: www.railphoto-art.org; (608)-251-3262.

The inaugural **International Early Engines Conference** will be held at the Elsecar Heritage Center in South

Yorkshire, England, May 11-13, 2017. The conference provides a forum for the presentation and discussion of new research into heat engines prior to 1812 and will include paper sessions and visits to local engine houses and related sites. Elsecar is the location of the "Great Engine" of 1795, the only Newcomen-type atmospheric beam engine in the world to have remained in its original location. Info: www.earlyengines.org/ieec-2017-conference.

The non-profit **National Preservation Institute** offers training seminars at locations across the U.S. for those involved in the management, preservation, and stewardship of cultural heritage. The institute has announced its 2016-17 slate of offerings. Continued education seminars are taught by faculty who highlight state-of-the-art practices. Among seminars that may interest those with an IA bent are CERCLA and NHPA Coordination for Superfund Sites, Emerging Technologies for Cultural Resources, GIS for Cultural Resources, Historic Bridges, Landscape Preservation, and Preservation Planning and Policy Development for Historic Roads. Info: www.npi.org. ■

CHAPTER NEWS

Northern New England held its spring tour on May 21 in Hillsborough, N.H. The tour included stops at each of the town's five remaining American Society of Civil Engineers (ASCE) Landmark stone-arch bridges. This was followed by a visit to the historic hilltop village of Hillsborough, which included a stop at the Gibson pewter shop where artisan Jonathan Gibson gave a bowl-spinning demonstration. The tour continued to the nearby Hopkinton Dam flood-control project of the U.S. Army Corps of Engineers and the Rowell Covered Bridge. The tour concluded in Contoocook village with a visit to the historic covered railroad bridge and depot.

Northern Ohio. On Aug. 22, chapter members toured **Quasar Energy Group's** anaerobic digestion facility in Wooster, Ohio. Quasar is based in Cleveland and designs, builds, owns, and operates anaerobic digestion facilities to produce renewable energy. According to Quasar CEO Clemens Halene, nearly every component is manufactured in northeast Ohio and installed by Quasar's own construction crews. The Wooster plant receives non-hazardous biomass including feedstock from chicken guts, feathers, and manure, and #2 sludge from waste treatment plants. Three digesters, working like giant stomachs, produce methane, which in turn powers a 16-cylinder engine. The electricity generated runs the Quasar plant and the City of Wooster's water and waste-pollution control facilities saving the city around \$2,500 per month in utility costs. The heat given off by the engine is used to heat the buildings in winter and also to provide heat for the sludge evaporator. After lunch, the chapter was welcomed to the Ohio State University's Ohio Agricultural Research & Development Center (OARDC), a teaching and research facility. Members enjoyed presentations from speakers who highlighted OARDC's collaborations and partnerships with private industry including Quasar, BioHio Research Park, and Ohio's craft brewers. Presentations were followed by a brief tour of the lovely research arboretum.—*Mary Starbuck and David Wiesenberg*

Oliver Evans (Greater Philadelphia). In April, Joel Spivak [SIA] presented a talk on the history of the Fairmount Park

Trolley, which opened in 1896 and ceased operations in 1946. In May, Brad Maule delivered an illustrated lecture on the historic **Manayunk Viaduct** over the Schuylkill River. The Pennsylvania RR built the massive open-spandrel-arch bridge in 1917. The chapter's annual June picnic at the Fairmount Water Works featured a presentation on Philadelphia's ferries by Stephen Nepa.



Brad Maule

Manayunk Viaduct.

Roebling (Greater N.Y.-N.J.). Over the past quarter, the chapter has kept up an impressive schedule of guided tours. Among the featured sites have been the NY Transit Museum in Brooklyn (Apr. 15); John A. Roebling's Sons Trenton wire works (May 7); Bethlehem Steel in northeast Pennsylvania (May 14); Mead's Basin of the Morris Canal in Mountain View, N.J. (May 15); the Chester Furnace in Morris County, N.J. (May 21); the Roebling (N.J.) Museum (June 4); the Morris Aqueduct near Morristown, N.J. (June 11); and the Morris Canal Inclined Plane in Ledgewood, N.J. (July 10).

Southern New England met on May 14 in the Salisbury Iron District of northwest Connecticut. The event was held in conjunction with the Friends of Beckley Furnace. The day began at the furnace in East Canaan followed by afternoon stops at Lime Rock Furnace #2 in nearby Salisbury and the Sharon Valley Lime Kiln in Sharon. The final stop was over the New York border to Copake Furnace #2 and the Copake Iron Works Museum.



Ron Petrie

Quasar Energy Group anaerobic digestion facility.

Support Your Local Chapter. For info on a chapter near you or to start one, contact Ron Petrie, SIA Director, Local Chapter Chair (ron@siahq.org; 216-372-8623) or check out the local chapters section of the SIA website (www.sia-web.org). ■

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

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CALENDAR

2016

Oct. 19-22: Society for the Preservation of Old Mills (SPOOM) Annual Conference, Dayton, Ohio. Tours of gristmills and other historic sites in the Miami Valley. Info: www.spoom.org.

Oct. 23: GREAT FALLS SYMPOSIUM ON THE INDUSTRIAL ARCHEOLOGY OF THE NEW YORK-NEW JERSEY AREA, PATERSON, N.J. 36th annual event held by the SIA Roebbling Chapter. Info: www.roebblingsia.org.

Oct. 28-30: SIA FALL TOUR, FOX RIVER VALLEY, WIS. Info: www.sia-web.org.

Oct. 29: Conversations Northeast, Center for Railroad Photography & Art and University of Connecticut, Storrs, Conn. See article in this issue. Info: www.railphoto-art.org.

Oct. 30-Nov. 2: Assn. for Preservation Technology International Annual Conference, San Antonio, Texas. Info: www.apti.org.

Nov. 12: Tide Mill Institute Annual Conference, Boston, Mass. Presentations and tours at the Metropolitan Waterworks Museum. Info: www.tidemillinstitute.org/47.html.

Nov. 15-18: National Trust for Historic Preservation Conference, Houston, Texas. Info: <http://pastforwardconference.org/pastforward2016/>.

2017

Jan. 4-8: Society for Historical Archaeology Annual Conference, Fort Worth, Texas. Info: <http://sha.org/conferences/>.

Apr. 19-22: National Council on Public History Annual Meeting, Indianapolis, Ind. Info: <http://ncph.org/conference/2017-annual-meeting/>.

May 11-13: 1st International Early Engines Conference, Eusecar, South Yorkshire, England. See article in this issue. Info: www.earlyengines.org.

May 18-21: SIA 46th ANNUAL CONFERENCE, HOUSTON, TEX. Watch future issues for updates. Info: www.sia-web.org.

May 31-June 3: Vernacular Architecture Forum Annual Conference, Salt Lake City, Utah. Info: www.vernaculararchitectureforum.org.

June 1-4: Railway & Locomotive Historical Society Annual Meeting, Stamford, Conn. Info: www.rlhs.org.

June 7-11: Society of Architectural Historians Annual Conference, Glasgow, Scotland, U.K. Info: www.sah.org/conferences-and-programs/2017-conference-glasgow.

June 15-19: Mining History Association Annual Conference, Fairbanks, Alaska. Info: www.mininghistoryassociation.org.

July 23-29: International Assn. for Caribbean Archaeology Biennial Conference, St. Croix, U.S. Virgin Islands. Covers all archeology from prehistoric through colonial to WWII. Info: www.stcroixarchaeology.org/iaca.html.

Oct. 4-7: Society for Commercial Archeology Conference, Cincinnati, Ohio. Info: www.sca-roadside.org.