early 200 SIA members and guests gathered in Chicago June 6–9 for the SIA’s 48th Annual Conference. For a sizable number of the attendees, this was a return visit; the last time the SIA held its conference in Chicago was back in 1991. Headquartered at the Hyatt Regency McCormick Place, the conference featured classic Chicago manufacturing such as steel, rail transport, and the Pullman Co., as well as newer industries explored in the Energy and the Nuclear Age tour.

The conference followed the SIA's established format of pre-conference tours on Thursday, Friday process and historic site tours, paper sessions and annual business meeting on Saturday, and post-conference historic site tours on Sunday. Thursday’s opening reception was held at The Plant, formerly a Peer Foods meatpacking plant dating from 1925. It is now repurposed as an incubator for food and farming businesses. A highlight of the reception was an entertaining and informative presentation by Dominic A. Pacyga on “Chicago’s Industrial History.” Saturday’s banquet was held at Emerald Green at Lost Marsh in Hammond, Ind. While this venue boasts views of the “natural beauty of Lake George,” SIA members could be seen admiring instead the BP Whiting oil refinery and steel mills on the horizon.

Paper sessions included a special emphasis on Chicago industries and two sessions celebrating HAER’s 50th anniversary. New this year, Patrick Harshbarger and Fred Quivik led a session on “Debriefing the Friday Process Tours.” This was an opportunity for attendees to review and discuss what they had seen on their tours, and to hear some first-hand accounts from the other tours. The session aimed to provide some collective experience and synthesis among the various itineraries.

Volunteer correspondents for SIAN submitted the following reports and photographs from the conference:

(continued on page 2)
Thursday Tour 1: Steel and Oil took participants south toward Indiana through the fog, with tour leaders Jacob Kaplan and Patrick Steffes describing important sites along the highway. The bus drove over the Chicago Skyway, a 7.8-mi.-long viaduct, and also for a short distance paralleled the route of the South Shore Line, regarded by some as the last electric interurban railway in the U.S., which runs between Chicago and South Bend, Ind.

The first destination was the ArcelorMittal Burns Harbor steel mill. ArcelorMittal bought the mill from bankrupt Bethlehem Steel in 2001. Our group was met by Larry Fabina, who has spent 45 years in the steel business and is currently Manager of Continuous Improvement at the mill. He reviewed the mill’s history and summarized its current operations. Burns Harbor, constructed starting in 1963, was the last integrated steel mill built in the U.S. It was producing steel products by 1964 and this year is celebrating 25 years of rolled products and 50 years of making liquid steel.

Fabina said that the Burns Harbor location is ideal since it has good access to raw materials and is also close to major markets. However, the location is controversial because it destroyed a dunes habitat. Northern Indiana is now the largest steel-making region in the U.S., and Burns Harbor is ArcelorMittal’s second-largest U.S. facility. The mill covers 3,300 acres and has 4,000 employees (600 salaried) working three shifts. Sixty-seven miles of railroad track plus a fleet of locomotives serve the plant.

The mill has two blast furnaces for iron and three basic oxygen furnaces for steel. It produces 14,000 tons of liquid steel a day, or 5 million tons per year. The furnaces are fed with iron ore from Minnesota (nearly 90 shiploads per year), coke from West Virginia coal, and local limestone. The mill produces its own coke in 164 ovens.

The mill concentrates on plate and coil production. The main markets are steel service centers (42%), the automotive sector (37%), and sales to other manufacturing segments (21%), mainly appliance, construction equipment, and machinery manufacturers. Fabina said that General Motors is the plant’s largest customer, but added, “Our steel is in every car manufactured in North America.”

Finally it was time to don hard hats and safety glasses and head for the hot-dip galvanizing coil mill and the plate mill. The noise level in both mills was quite high, and we were all amazed by the spectacle and the heat. The coil line runs at 400 ft./min., and for continuous operation it is designed with large accumulator towers to provide slack so that a new coil can be welded on to the tail of an old one. The zinc coating bath is constantly being stirred and cleaned by a robot, and air blades are used to control the thickness of the coating. The plate mill rolls plates up to 110” wide, and from 3/16” to 3.33” thickness. From the catwalk, we watched a 96” plate move down the line. All the lines are highly automated.

The group ate box lunches at the Indiana Dunes...
National Park, the newest national park. The next stop was the “first scientifically designed community in America,” the fascinating, isolated neighborhood of Marktown in East Chicago, Ind. It was designed by architect Howard Van Doren Shaw and built as housing for workers by the owner of the Mark Mfg. Co.’s Indiana Harbor tubing mill. Construction began in 1917. We were met by Paul Myers, the unofficial (and, as he adds, unindicted) mayor. He explained that because of WWI and changes in ownership, only a small part of the planned community was built, and much of that has been lost over the years. Five floor plans were created with three different exterior elevations. The development was designed for cars to park on the sidewalk and pedestrians to walk in the street—a novelty that rated a mention in Ripley’s “Believe It or Not.” The group walked around the neighborhood, and Myers opened his own five-room house, which we found compact but comfortable. Myers said the biggest issue facing the future of Marktown is its location next to BP’s Whiting Refinery.

The next stop was a perimeter tour of the neighboring BP Whiting Refinery in Whiting, Ind., led by Tom Shepherd and two refinery retirees. The refinery was built in 1889 by Standard Oil Co. of Indiana. Standard acquired the American Oil Co. (Baltimore) in 1922, and by 1985 all of Standard’s subsidiaries were incorporated as Amoco Corp. The following year, the company was the first American refiner to cease production of leaded gasoline. BP purchased Amoco in 1998. It is the largest inland refinery in the U.S. (and the third largest in the country) with a capacity of 425,000 BB/day. The refinery covers 2,000 acres and has 1,800 employees.

Crude oil arrives by pipeline from Oklahoma and Texas, and some Alberta tar sands crude comes by rail from Canada. The refinery makes light products such as gasoline, diesel, and jet fuel; the asphalt left at the end of the refining process is used for road-building. Shepherd said that the refinery supplies most of the gasoline used in the Great Lakes region, and the plant has undergone $30 million in security upgrades since 9/11.

The last stop was the site of the former U.S. Steel South Works in Chicago. Employment at the mill peaked in the 1950s and 1960s at 20,000 workers, but it closed in 1992. The north ore yard bin walls, massive walls where iron ore was stored after being unloaded from ships, are the only structures remaining on the former U.S. Steel property. The site is currently controlled by the Chicago Park District and is known as Steelworkers Park. A section of one of the walls has been converted into a climbing wall, and a sculpture commemorates former steelworkers. Several redevelopment plans have been proposed for the 600-acre lakefront site, but none has prospered so far.

Thursday Tour 2: Illinois Railway Museum started off with Dan Pogorzelski of Forgotten Chicago providing a narrative of Chicago history during the bus ride. The Illinois Railway Museum in Union is the largest such collection in the U.S. with over 400 pieces of equipment. It opened in 1965. Tour participants were welcomed by Executive Director Nick Kallas, then stopped at a pavilion to view several freight car drawings from the Pullman Library. Bob Webber, the library’s curator, discussed the drawings, the Pullman Library, and the other two libraries managed by the museum. The group then viewed several historic passenger cars in Display Barn #3, starting off with the Nevada Northern Ely, a business car built in 1889.

Next, tour participants rode in Chicago Transit Authority Car #4290 over the museum’s five-mi. line originally built by the Elgin & Belvidere Electric Co. Built in 1922 by the Cincinnati Car Co., #4290 operated throughout Chicago’s elevated and subway rapid transit system until retired in 1973. After the ride, some of the group accepted an invitation (continued on page 4)
from Illinois Railway Museum President Marcus Ruef to go into Spaubling Tower. The tower was built around 1890 by the Elgin, Joliet & Eastern Ry. to regulate train movements through its crossing with the Milwaukee Rd. just east of Elgin, Ill.

After lunch, tour participants visited the electric car restoration shop to view the woodworking machinery and then entered Display Barn #7, one of four barns which house the museum's collection of electric-traction rolling stock. Of particular interest was the Chicago, North Shore & Milwaukee Electroliner, a streamlined, articulated interurban car built by the St. Louis Car Co. in 1941.

The next stop was Barn #9 where the museum's large steam locomotives are stored. Nick Kallas provided an engrossing description of how Atchison Topeka & Santa Fe #2903, a Northern-type locomotive built by Baldwin Locomotive Works in 1943, was moved from the Chicago Museum of Science & Industry to the Illinois Railway Museum.

The tour participants concluded their visit by exploring the rest of the collection on their own, including J. Neils Lumber Company #5, a Shay-type steam locomotive built by Lima Locomotive Works in 1929.

**Thursday Tour 3, the Chicago Loop Architectural Walking Tour**

was led by Ward Miller, Executive Director of Preservation Chicago. The tour explored the architecture of Adler & Sullivan, Louis Sullivan, Burnham & Root, Holabird & Roche, Ludwig Mies van der Rohe, and others. Lunch was enjoyed at a famous German-American restaurant, The Berghoff.

**Friday Tour 1, North Chicago** illustrated the diversity of Chicago's industry. Automation and touch labor, specialized trades and flexible labor, government and private and employee-owned, it was all here in just three stops. Although not on our tour, the O'Hare Airport must be acknowledged. Its establishment after the Second World War drew Chicago industry north and west.

First, we headed due north to Skokie. Our guide, Jacob Kaplan, ably introduced us to the neighborhoods we traversed. Many of Chicago's interstate highways ("expressways") were built along railroad corridors. That trend has reversed in more recent years, with the transit authority building rail lines down the medians of the expressways.

The **Skokie Shops** perform heavy maintenance for the Chicago Transit Authority's (CTA) rail cars. While we scoured the cavernous building for signs of its development from a small rail yard on one of the many elevated train lines (known as the "L"), management prefers to describe it as a collection of shops divided functionally. These in turn represent a variety of skilled trades. While the facility does include, for example, a machine for truing wheels as-installed, most maintenance requires removing items such as brakes, electronics, and air conditioners and moving them to their respective zones within the building.

Most cars come here as a result of inspections at the light-maintenance rail yard at the end of each subway and L line. An extreme example of unscheduled maintenance was the derailment on the Green Line the day before, which delayed some of us on the way to the host hotel. Skokie Shops will thoroughly check that car before it returns to passenger service.

The Skokie Shops are also home to the transit authority’s fleet of vintage cars. These go back as far as 90 years, whereas much of the regularly-scheduled fleet is around 30 years old.

Next we backtracked into Chicago. In the 1950s, **S&C Electric Co.** moved into an industrial park in the otherwise residential neighborhood of Rogers Park. Well before S&C arrived, and continuing to this day, Rogers Park has been a favorite of municipal employees constrained to live within the Chicago boundaries but desiring a smaller-town atmosphere. S&C was founded in 1911 by two employees of the electric utility serving Chicago. The pair invented a line fuse less likely to cause fires. From this beginning

(continued on page 14)
David A. Simmons
2019 General Tools Award Recipient

The following citation was read at the 2019 Annual Business Meeting in Chicago, Ill., by Duncan Hay, chair of the General Tools Award committee.

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: (1) The recipient must have given noteworthy, beyond-the-call-of-duty service, over an extended period of time, to the cause of industrial archeology. (2) The type of service 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 only be made to living individuals.

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

The recipient is selected by the members of the General Tools Award committee, based on nominations and suggestions from the membership. Committee members are appointed by the SIA President and serve three-year overlapping terms. I am completing my third and final year and will be followed by Patrick Harshbarger, Fred Quivik, and a player to be named later.

Our nominee for this year's General Tools Award has been an officer, tour organizer, preservation advocate, and contributor to the field of IA in many ways over many years. He organized two SIA fall tours, served three terms on the Society's Board of Directors, conducted systematic statewide inventories, advised multiple HAER teams, helped local groups organize their efforts to preserve historic engineering structures, presented more talks than I can count, and written and edited books and articles for SIA publications and those of other organizations.

A life-long resident of central Ohio, David Simmons started work with the Ohio State Historic Preservation Office in 1976 and joined SIA the following year. Over the next decade he wrote and edited National Register nominations and reviewed projects under Section 106 of the National Historic Preservation Act. Along the way he developed a special interest in historic bridges. Starting in 1983, he worked with the Ohio Dept. of Transportation to conduct four statewide historic bridge surveys. Based on that work, he started writing a regular column called “Historically Speaking” in a magazine published by the County Engineers’ Association of Ohio. This was an important audience because the fate of many historic bridges lie in the hands of county and municipal engineers.

In 1984, Ohio Historical Society, parent organization of the Ohio State Historic Preservation Office, began production of a lavishly-illustrated, large-format, popular history magazine called Timeline. David shifted to the Timeline staff in 1986, rising to become Editor and eventually Senior Editor. He remained interested in bridges, engineering, and manufacturing, and Timeline provided an outlet to share those passions with a broader audience.

David is a recognized authority on historic bridges. He is a certified bridge inspector in the State of Ohio and has served as a technical advisor on the Historic American Engineering Record’s Ohio Bridge Survey in 1986 that documented more than 16 structures, on the Cast and Wrought Iron Bridges of Ohio Survey that recorded another 17 in 1992, and on several other HAER projects. He organized eight historic bridge conferences in Ohio and was program chair for the Second National Covered Bridge Conference at Dayton in 2013. That year he was also invited to speak at the Taishun Covered Bridge Festival in Zhejiang Province, China.

David's preservation work goes beyond regulation at the SHPO, advocacy and education through Timeline, or technical advice to HAER teams. He's gotten in it up to his elbows. As President of the Ohio Historic Bridge Association he directed the restoration of the 1876 Johnson Mill Bridge over
New Blenheim Covered Bridge a Win for Community, Highlights Historic Preservation Tensions

As a New York community celebrates the reconstruction of its cherished covered bridge, the preservation community is left to ponder the value of historically accurate reconstruction versus other alternatives.

The Blenheim Covered Bridge over Schoharie Creek in North Blenheim, N.Y., was, at 210 ft., one of the longest single-span covered bridges in the world. Built in 1855 by Nicholas Montgomery Powers of Vermont, the bridge featured a single, central arch that stretched between the abutments and reached the ridge pole in the center of the bridge. In addition, the bridge had three trusses, one in the center and the other two for the sidewalls. These trusses were a series of "X" frames in boxes, of the type patented in 1830 by Col. Stephen Long. Powers used 94,000 board-ft. of lumber weighing 27 tons, as well as 3,600 lbs. of bolts and 1,500 lbs. of washers to connect all the braces. He was paid $6,000 for his work.

The bridge opened to traffic in 1855 as a privately owned toll bridge. In 1869 flood waters created a new channel at the western abutment, which required the construction of a small extension across the gap. In 1895 the wooden extension was replaced by a steel one. A heavy load of ice cracked the steel extension in 1930, but the covered bridge held firm. The writing was on the wall, however, and in 1932 a new steel highway bridge was built. The original plan was then to remove the old wooden bridge, but after an outpouring of public sentiment it was purchased by Schoharie County as a local landmark, with pedestrian sightseeing access from the eastern abutment. The bridge was named a National Historic Landmark in 1964.

The bridge led an uneventful life until Aug. 28, 2011, when record Schoharie Creek flooding associated with Hurricanes Irene and Lee swept the bridge off its abutments and smashed it to pieces downstream. Efforts to rebuild the bridge were an uphill struggle. First, only a few of the original timbers were salvaged, making a restoration impossible.
Call For Papers

The Society for Industrial Archeology invites proposals for presentations and poster displays at the 49th Annual Conference in the Lehigh Valley, Pa., May 28–31, 2020. The presentation sessions will be held at the conference hotel, the Historic Hotel Bethlehem, on Sat., May 30. Conference sponsors include the Anthracite Heritage Museum (Scranton), the National Canal Museum (Easton), and the National Museum of Industrial History (Bethlehem).

We invite presentations on all topics related to industrial archeology, industrial heritage, history of technology, social change related to industry, and historic industrial structures and bridges. Papers about industries in Pennsylvania’s Anthracite Region and on canal history are particularly encouraged. Proposals on historic bridge-related topics will be considered for inclusion in the 27th Historic Bridge Symposium. Poster displays are also encouraged, and can be on works in progress or finished projects. All presentations and poster displays should offer both interpretation and synthesis of data.


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

Proposal Formats: Proposals should be submitted online unless special arrangements have been made. Each proposal must include:

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

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

To submit your proposal and for further information, go to the online form linked at http://www.sia-web.org/sia-49th-annual-conference/. For questions please contact David A. Simmons, SIA Presentations Committee Chair, dsimmons@ohiohistory.org.

The bridge’s NHL listing was withdrawn in 2015. Second, the Federal Emergency Management Agency (FEMA) initially refused to pay for a replacement bridge, arguing that as a unique historic artifact the bridge was irreplaceable and therefore not eligible for FEMA funding. Local and state authorities made a lengthy series of appeals; one of their arguments was that the bridge was important to the community as an “alternate meeting place.” FEMA finally agreed to pay $6.7 million, or 75%, of the cost of replacing the bridge (New York State came up with the rest of the money).

The new bridge is a replica of the old one, but the abutments are 12 ft. higher to protect it from future floods. The new bridge was built by 3G Construction, Inc., of Holderness, N.H. The firm, led by Stan Gratton II, has extensive experience building, repairing, and moving large timber structures. Gratton was able to symbolically incorporate a few salvaged timbers into the new bridge. The process of building the bridge on the ground and then moving it to the abutments was documented by the NOVA program, “Operation Bridge Rescue,” shown by PBS in the fall of 2018.

The bridge was dedicated June 29, 2019. “Our hearts were broken when we lost (the Blenheim bridge). We had a time to mourn her passing. Today, it’s a new restoration, and this is the time to rejoice,” said Gail Shaffer, a Blenheim resident and former N.Y. Secretary of State who led the bridge reconstruction efforts. “It’s been a very long journey to get here, to get from the dream to the reality of this bridge. And we will cherish this bridge.”

Steve Muller
Steve Walton—2019 Vogel Prize Recipient

Committee chair Arron Kotlensky read the following Vogel Prize citation at the 2019 SIA Annual Business Meeting in Chicago.

Since its 2002 annual meeting in Brooklyn, the SIA has recognized each year exemplary scholarship in industrial archeology with its Robert M. Vogel Prize (and as many will recall prior to that time, the Norton Prize). Named for SIA co-founder and distinguished member Robert Vogel, this award honors the author of an outstanding article published in the past three years in the Society's journal, IA. The prize consists of a cash award and a mounted foundry pattern bearing a plaque engraved with the recipient's name. Articles considered for the award must present a clearly stated thesis supported by a well-constructed narrative. Careful analysis of sources and material culture and the use of high-quality illustrations and photographs 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 each serve five-year terms.

In a close field of candidates, this year's recipient gave us an article that matches these requirements in an outstanding manner. A key strength—really a point of pride—of industrial archeological research, fieldwork, and writing is the opportunity to reveal forgotten machinery, sites, and landscapes of once-robust industrial systems. Past and present, mining, of course, is just such an industrial system that is well-suited to the approaches of industrial archeology, as many issues of the Society's journal will show. But mining has a lot of moving parts, and often just one of those parts formed a critical path that has been left ill-defined if not outright neglected. The 2019 recipient of the Vogel Prize, Steven A. Walton, uncovered a half-buried, forgotten part in his article, “Machinery to Match the Materials: Iron Ore Washing in Pennsylvania,” featured in Volume 41, Issues 1 and 2, a theme issue dedicated to the archeology of industry in the Keystone State.

During his time as a professor at Pennsylvania State University, Steve Walton took a keen interest in how 19th-c. ironmakers and ore miners in central Pennsylvania tackled the dilemma of concentrating, or washing, increasingly valuable brown hematite iron ore. In his article, he follows the rough 75-year arc of a regional solution to a peculiar mining problem. Walton does this step by step, first exposing the deficiencies of later contemporary authors, then positing that the leaps made in Pennsylvania iron production in the mid-19th c. were contingent on efficiently cleaning mud from ore. Then he takes his audience to the action. In detail, he gives an account of the invention and operation of the log washer, a kind of Archimedes screw that through water and agitation would strip clay and gravel from ore. But he spares no aspect of context: after describing the machinery, he explains in concise detail the economic geology that called for this approach, its spread to other regions in the nation, and the need by mining concerns to drill for water, build novel concentrating plants, disperse muddy waste, and compensate nearby farmers for land lost. He then traces how pioneering methods of ore washing were aggressively adapted and scaled up after the Civil War by outside interests, like Andrew Carnegie, looking to draw ore to the blast furnaces of Pittsburgh by the 1880s as a measure against high-cost Lake Superior ores.

Steve Walton's trademark diligence in archival research and analysis is worthy of imitation for any who engage in this work of ours. Yet his writing is by no means stilted; there are brief touches of humor that round the edges of his cradle-to-grave story. He is also careful to give attention where it is due, highlighting the role of public archeology in documenting and appreciating the remains of an ore-washing site in Centre County, Pa. from 2010 to 2012. By these merits, Steve Walton has been awarded the 2019 Vogel Prize of the SIA.
Minutes of the SIA’s 48th Annual Business Meeting
June 8, 2019

Call to Order. President Christopher Marston called the Annual Business Meeting to order at 12:30 p.m. Eastern Time in the Hyde Park Meeting Room, 1st Floor Conference Center, Hyatt Regency McCormick Place, Chicago.

President’s Report. President Marston welcomed everyone and noted that SIA’s first annual conference was held at the Cooper Union in New York City in 1972. He welcomed those attending their first SIA conference and acknowledged Pat Malone, who has attended every SIA annual conference since 1972.

Marston said that HAER is celebrating its 50th anniversary here in Chicago and noted that all his colleagues from the HAER staff are in attendance. He then asked for a show of hands to see who in the audience has worked on HAER project at one point in their career, whether as an intern, contractor, or volunteer. Nearly a third of hands went up.

Marston reminded attendees that the SIA was last in Chicago in 1991, which he also attended with several of his HAER colleagues from the Homestead (Pa.) field office. This group included Mark Brown, who first introduced Marston to SIA in 1989 when he entered the Homestead field office with his tote bags fresh from the SIA Quebec City Conference. Marston then asked who else in attendance also went to the Chicago conference in 1991? A sizable number responded. Marston then thanked SIA Chicago conference co-chairs Jacob Kaplan and Patrick Steffes for organizing an excellent conference.

Recognition of Conference Organizers and Supporters. Jacob Kaplan introduced conference planning committee members Patrick Steffes, Serhii Chrucky, Matthew Jacques, Matthew Kaplan, Christopher Marston, Patrick McBriarty, Ward Miller, Courtney Murtaugh, Paul Myers, Daniel O’Rourke, Daniel Pogorzelski, Joe Schwieterman, Tom Shepherd, Saul Tannenbaum, and Austin Weber and thanked them for their great work in organizing the conference. Kaplan also thanked sponsors and partner organizations Calumet Heritage Partnership, The Field Museum, Forgotten Chicago, Preservation Chicago, Eli’s Cheesecake, Vienna Beef, and others who helped out including Mark Bouman and Dominic Pacyga. He then recognized and thanked the Presentation Committee, chaired by Saul Tannenbaum, with Christopher Marston, Mark M. Brown, Daniel Pogorzelski, Rebecca Burrow, David Simmons, and T. Arron Kotlensky.

After recognizing some of the notable morning paper sessions, including HAER at 50 and World Heritage, President Marston invited Fred Quivik to speak. Quivik described the process tour debriefing session he was running in the afternoon with Patrick Harshbarger. He wanted to create a forum on the SIA conference experience that would include a discussion on the process tours and encourage feedback from members. Marston gave a special thank you to Daniel Schneider at SIA Headquarters for his work on designing the guidebook, program, and posters, and all his work handling the SIA website and registration. He also thanked SIA Events Coordinator, Courtney Murtaugh, who completed running her second SIA conference, here in her hometown of Chicago.

Secretary’s Report. Secretary James Bouchard stated that minutes of the previous year’s Annual Business Meeting were published in SIAN Vol. 47, No. 3 (Summer 2018). He asked for amendments or corrections; none were forthcoming. President Marston called for a motion to approve the 2018 Annual Business Meeting minutes as published. David Simmons so moved, Fred Quivik seconded the motion, and it passed unanimously.

Treasurer’s Report. Treasurer Nanci Batchelor read her report: “The following report is for the year that ended Dec. 31, 2018. 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 2018 with a total fund balance of $238,140. Cash receipts for the year totaled $101,331. The majority of our annual income comes from membership dues. In 2018, the total dues received were $54,300. While we typically receive dues for the upcoming year in Dec., those payments were not recorded until Jan. 2019. 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. Total expenses for the year were $81,354. The production costs of our publications, the newsletter, and the journal combined for a total of $34,970. $26,517 went towards labor, postage was $4,161, insurance, prizes, awards, and scholarships were $9,782. Office overhead and a few miscellaneous items made up the balance. The Society closed 2018 with excess revenue over expenses of $19,977. The total fund balance was $258,188, of which $53,091 is in restricted funds. Through Mar. 2019, the Society has had a total of $37,712 in cash receipts and has spent $15,054.”

Headquarters Report. SIA Headquarters Manager Daniel Schneider read his membership report: “The 2019 membership to date is 908, which includes 64 new members since the beginning of the year. It includes at least one “new” member from 2002 who has rejoined. The SIA will produce a membership directory in 2019 for the first time in several years. The directory will be produced and distributed digitally, so please make sure that headquarters has
your email address on file. I will be in Estonia for an artist’s residency September through November of this year. A substitute, Kyle Parker-McGlynn, will take care of day-to-day headquarters operations in my absence.”

SIA Executive Secretary Steven Walton reported: “Much of what happens at Headquarters is done by Daniel Schneider, our indefatigable office manager. Because I have been on sabbatical this academic year, ExSec activities have been more reactive than proactive. HQ sent out stacks of 25 rack cards to 10 museums deemed most relevant to IA. We directly gained one new member from that (one museum staff member). Second, HQ sent an introductory letter with 5 cards to another 120 museums chosen from a list of ‘Industrial Museums in the US’ (Wikipedia). HQ took on the task of ordering conference t-shirts. We had 60 printed (55 purchased and 5 for volunteers and staff), with a net profit of about $440 for the preservation and scholarship funds. Unit costs jumped from $12 to $16 because our first vendor folded. Two-color printing also added to the cost. HQ can continue this process for conferences or fall tours if requested. HQ also purchased eight telescoping easels for conference and tour poster displays and signage for just under $100.”

The Executive Secretary attended the APT/CHSA Industrial Archaeology Symposium on May 17 in Chicago as both SIA representative and IA editor to spread our brand and solicit articles from the presenters. Some back issues of the journal were handed out with rack cards in each, to very good take up.

Several journals and societies were contacted regarding the idea of ad exchanges (Old Mill News [SPOOM], Early American Industries Assn., AASLH). Some were receptive to the idea but further follow-up is needed. Also ongoing is the plan for the tables of contents of IA to be included in the free online database of the history of science, technology, and medicine called IsisCB Explore at the University of Oklahoma (https://data.isiscb.org). We will continue plugging away at this time-intensive task.

**IA Journal.** Steven Walton, Editor of IA, continued: “The current editor has put out two issues and recognizes that simultaneous issue production, article editing for future issues, and long-term theme issue planning and article solicitation is a complex task at which he is not terribly effective. In addition, having been on sabbatical this last academic year has been less than compatible with journal editing. The current issue, Vol. 42.2, is out after a delay after the holiday season. Production quality of this issue was less than it could have been, but I will be working with Sheridan to correct this in the future. Volume 43 will be a double issue on the theme ‘Intangibles in IA,’ proposed by Jeffery Benjamin. Editing of this volume will be completed soon, to be out before Labor Day. For Vol. 44, the call for papers for “Atomic IA” yielded some good ideas, but limited submissions so far. Currently five articles are promised. A theme issue tied to the ‘HAER at 50’ strand at this conference is under way, helmed by Justine Christianson. Papers are being solicited for a fall deadline. The unsolicited submission rate is still very low, and some of the material that comes in is not appropriate for IA or has not passed peer-review.”

Our relationship with JSTOR (www.jstor.org) is strong and getting better. We now pay $300 p.a. to give all members access to all the back issues through a personal login. Article downloads have generated income to SIA of $4,088.67 in the 2018 calendar year (up from $2,400 the previous year). This represents 11,452 “views+downloads” of nearly 5,800 pages at 2,200 institutional and individual accesses. A JSTOR representative informed me about how we can work with them to increase exposure to IA on JSTOR.

Regarding possibly moving the journal to a commercial/university press to increase exposure and reputation, JSTOR is another option there, and they could also handle membership renewals. This would strongly impact HQ operations, and would require considerable further investigation.

**IA is not doing well in attracting unsolicited submissions. Reasons for this might be the challenges (and lack of rewards) for IA practitioners in the CRM world, as well as the small number of academic writers working on IA; perceived rank or visibility of IA; type of content; or not being on an ePublishing platform. Regardless, there may be a negative feedback spiral that is depressing submissions.**

I have opened a dialogue with the Board about what the scope of the journal should be. We currently say we publish articles dealing with “industrial heritage,” which includes “considerations of sites, artifacts, processes, landscapes, and individuals related to the development of industries and industrialized societies.” I will work to broaden the appeal and scope of the journal to more authors.

**SIA Newsletter.** SIAN Editor Marni Blake Walter reported: “Since last year’s business meeting, the SIAN has continued its quarterly publication schedule. The current issue (Spring 2019) is nearing completion, with the summer issue beginning to take shape as well. Many thanks to everyone who volunteered to write about and photograph the events at this conference; to the members who send a steady stream of interesting notes, publications, websites, and news items throughout the year; and to those who help with proofreading, layout, printing, and mailing of each issue. It is because of all these contributors that the SIAN reflects the work and varied interests of our members. So please keep the links, news, and article ideas coming! I’d like to have copy and photos for the summer issue by July 8, 2019. Thank you.”

**Tours & Conferences.** SIA Events Coordinator Courtney Murtaugh thanked the Chicago organizing committee for doing such a great job. She noted that there are 191 attendees, of which 157 registered for the full conference and 36 were first timers. She added that she went to Reno and exclaimed “It is amazing!”

Marc Belanger previewed the 2019 Fall Tour, to be held Sept. 19–22; the hotel is the Whitney Peak at $129/night. The hotel link will be up on the website soon because the (continued on page 20)
General Interest


Textiles


◆ David Segal. *A Royal Reputation Gets Trodden Underfoot*. *NYT* (May 19, 2019), Business pp. 1, 8. Axminster Carpets has a royal patent and provides carpets to British royalty, but has also produced carpet for JD Wetherspoon chain restaurants. It was founded in 1755, went bankrupt in 1835, and was revived in the 20th century.

Lumber & Paper


Water Transport


◆ David Brooks. *A Sunken Buffalo Canal Barge, a Coal Baron, a Canal Diver & a Publisher*. *New York History Blog* (July 25, 2019), https://newyorkhistoryblog.org. Leaping off of a story about a barge that sank full of salt while in tandem tow, this article explores connections to the tow barges including the companies responsible for the cargo and the personalities for which the barges were named.

◆ David McCauley. *Crossing on Time: Steam Engines, Fast Ships, and a Journey to the New World*. Roaring Brook, 2019. 128 pp., illus. $24.99. A children’s book celebrating the S.S. United States, the ocean liner that still holds the record for the fastest crossing of the Atlantic. The decommissioned ship is now rusting away in Philadelphia.

◆ W. E. Trout, III [SIA]. *Amazing Virginia Canals*. Virginia Canals & Navigations Society, 2019. 70 pp., illus., hardback, $35, vacanals.org/shop. Covers the high points of Virginia’s historic “Whitewater Ocean,” a thousand miles of whitewater and canal navigation. Illustrated by original color paintings by Art Markel and William “Sarge” Hoffman and photographs by Philip de Vos and Holt Messerly. Focuses on canal and river navigation technology in Virginia, including the unusual flash locks on the Willis’s and Slate; the Kanawha Canal’s Unfinished Division; the last day of digging on the Kempsville Canal; the tragedy of Frank Padget; and gundalow chutes on the Holston and Shenandoah. https://vacanals.org/shop/wp-content/uploads/2019/03/V CNS_AVC_poster-11x17-FINAL-web-res-read-only-030819_WHMJR.pdf

Railroads


David D. Morrison. Grand Central Terminal and Penn Station: Statuary and Sculptures. Arcadia, 2019. 128 pp. $21.99. Author is a retired Long Island Rail Road branch line manager and railroad historian. This is his seventh book in the “Images of Rail” series.

C. Roger Pellett. Whaleback Ships and the American Steel Barge Company. Detroit: Wayne State Univ. Pr., 2018. 208 pp. $39.99. Story of the whaleback ships and their inventor Alexander McDougall. His design led to the creation of the American Steel Barge Co. in 1888. (The last surviving of these ships, the S.S. Meteor, was an SIA conference tour site in 2000.)


Automobiles & Highways


Bernard A. Drew [SIA]. Well-Wheeled: How Cortlandt Field Bishop, Marguerite Westinghouse, Alden Sampson II and Gilded Age Lenox Cottagers Fueled the Brass Era of American Automobiling. Great Barrington, Mass., 2019. 312 pp., 225 photos & maps. Examines the stories of Berkshire cottagers from the unusual perspective of the cars, trucks, and motorcycles they drove. Thomas S. Morse opened an automobile storage business in a barn in a western Massachusetts village in 1902. The next year he began a registry of guests, their names, origins, destinations, vehicle makes, and chauffeurs. His successor, Oscar R. Hutchinson, continued the registry until 1922. The guestbooks eventually came into the author’s possession, and he spent two years uncovering anecdotes and stories of a vibrant bygone automotive period. This history covers a dozen Berkshire Country communities from Dalton to Sheffield.

Latoya Ruby Frazier and Dan Kaufman. The Last Cruz. NYT Magazine (May 5, 2019), pp. 36–53. A photo essay documenting the effect on the people in Lordstown, Ohio when GM decides to “unallocate” its plant.

Lyle Miller. The Road That Consumed Its Motels: Denver’s Santa Fe Drive. SCA Journal, Vol. 37, No. 1 (Spring 2019), pp. 20–29. Located on the southwest outskirts of Denver, Santa Fe Drive (US Route 85) was the location of automobile tourist cottages from the late-1920s to the 1930s, which morphed into a strip of classic motels of the 1950s to the 1960s. Widening of the highway in the 1970s and later resulted in removal of many motels.

Aeronautics & Aerospace

Jennifer Ross-Nazzal. Mission Accomplished, The Lunar Receiving Laboratory at the Johnson Space Center. SCA Journal, Vol. 37, No. 1 (Spring 2019), pp. 14–19. History behind the lab built to quarantine the astronauts and receive the geologic specimens collected from the moon. Curiously, NASA was so focused on getting astronauts to the moon that construction on a building to receive the men and the materials that came back did not get under way until 1966. The building was not certified as ready until the weeks before the first moon landing in July 1969. The history of the Lunar Receiving Laboratory was commissioned in advance of its demolition scheduled for 2020.

Agriculture & Food Processing


Buildings & Structures

Alison K. Hoagland. The Log Cabin: An American Icon. Univ. of Va. Pr., 2018. A long-overdue history of one of America’s most enduring architectural types and symbols. This book covers construction techniques, tools, materials and labor, and the cabin’s place as “the architecture of migration” during America’s colonial period and the 19th century. While the cabin became a symbol of democracy and the self-made man, it also had enduring associations with slavery and poverty. Later the cabin became associated with vacationing, popularized in American parks, camps, and dude

(continued on page 22)
The National Park Service is pleased to announce the publication of the *Guidelines for Rehabilitating Historic Covered Bridges*, edited by Christopher H. Marston [SIA], Architect, Historic American Engineering Record (HAER), and Thomas A. Vitanza, Senior Historical Architect, Historic Preservation Training Center (HPTC). The book is one of the final products of the Federal Highway Administration's National Historic Covered Bridges Preservation Program.

The *Guidelines* were prepared to illustrate best practices and provide technical examples that can be used in planning and executing rehabilitation projects for historic covered bridges, adapted from the principles of *The Secretary of the Interior's Standards for the Treatment of Historic Properties*. Focusing on rehabilitation, the *Guidelines* are organized by the function of structural elements. Following general principles, chapters examine superstructure, substructure, exterior envelope, site features, and safety/protection systems. Each section offers recommended and non-recommended treatments, with illustrated examples of retaining, protecting, maintaining, repairing, and replacing various elements of an historic covered bridge.

The book concludes with 11 covered bridge rehabilitation case studies (written by the engineers, bridgewrights, and public officials who worked on them), comprised of various truss types, locations, rehabilitation issues, and budgets. The *Guidelines* will be a useful resource for educating engineers, departments of transportation, state historic preservation officers, bridge owners, preservationists, and residents in maintaining these historic symbols of American engineering for future generations.

HAER is distributing the *Guidelines* to members of the historic bridge community nationwide. Additional copies may be requested by sending your mailing address to: christopher_marston@nps.gov. A digital, accessibility-compliant PDF is also available for download at https://www.nps.gov/hdp/project/coveredbridges/publications.htm.

*Christopher Marston*
with fuses, the product line broadened to include many innovative products for the electric distribution industry. The company’s products are highly visible to the public, both hung on utility poles and emerging from the ground in areas served by underground lines. However, S&C’s high-quality and automated technologies often allow these devices to be smaller, thus less obtrusive, than competitors’. Looking ahead, S&C has placed its bid to define the emerging “smart grid” and “micro grid” technologies.

The Rogers Park facility has expanded by increasing the proportion of work done in-house. We saw machining, plating, painting, and more. Although several processes use “touch” labor, the facility relies heavily on numerically controlled machines and the employees skilled to operate those.

Next we headed inland to Life Fitness, located on the edge of O’Hare Airport. Originally, the Franklin Park facility made pinball machines, and later Pac-Man and other video arcade games. Chicago was favorable to pinball manufacturing because of its furniture and precision machine industries. The Franklin Park facility started manufacturing exercise equipment during a period when Bally owned both the factory and Life Fitness.

Today, the Franklin Park facility specializes in assembly of cardio machines such as stationary bicycles. The facility strives for a flexible assembly floor, and on this day it was configured as two assembly lines, both producing treadmills. One way it achieves this flexibility is specializing in assembly. No winding of motors or welding of steel frames here! Also, the tooling at Franklin Park is selected to standardize the skills required. Returning to the hotel, Kaplan described the Union Row neighborhood, once the home to several of Chicago’s trade union halls.

Friday Tour 2: Southwest Side and Central Manufacturing District. Joe Schwieterman and Dan Pogorzelski were the guides for this tour. The route headed along Cermak Rd., named after Anton Cermak, a Chicago mayor who built a strong ethnic coalition. The Vienna Beef manufacturing plant was the first stop. The company manufactures 80 varieties of product including its hot dog using its original 1893 spice formula. Hot dogs are made from ground bull meat with added fat and spices. Its current plant opened in 2016 with greatly expanded technological monitoring and controls. The Vienna Beef hot dog is often the main ingredient in the Chicago-style hot dog with peppers, tomatoes, sweet pickle relish, celery salt, onions, yellow mustard, and a dill pickle spear on a steamed poppy seed bun. Chicago-style Vienna Beef hot dogs were a featured offering at the opening reception.

Wheatland Tube is located in the Back of the Yards neighborhood, which takes its name from the location of the Chicago Stockyards that closed in 1971. Wheatland Tube manufactures tubing for electrical wiring conduit and posts and rails for fencing and other manufacturing uses. Roll steel is purchased from different manufactures, slit into smaller widths, then cleaned, rolled, welded, cleaned, galvanized, coated, and cut to 10-ft. lengths. Tubing sizes range from 0.5-in. diameter to 5-in. round and 4-in. square.

Following a box lunch at McKinley Park, the tour moved on to the Ace Plating Co./Ace Spinning Co. The privately-owned businesses are located in three linked buildings that originally served the Lion Match Corp., manufacturer of printed matchbooks. The Ace Plating Co. electroplates brass, bronze, copper, nickel, and chrome onto a variety of castings. Many of its plated products see use in the funeral industry. The Ace Spinning Co. shapes metal into round objects for uses including lava lamp bases, Salvation Army kettles, and mutes for brass instruments.

The last stop of the day was the Forrest Hill RR junction at 84th St. This served as an example of work being done as part of the Chicago Regional Environmental and
Transportation Efficiency Program—CREATE Initiative. This multi-billion dollar initiative is intended to improve efficiency for railroads along with related vehicular traffic patterns.

**Friday Tour 3, Steel, Water, and Pullman** spanned defining Chicago industries and public infrastructure. The tour was developed and led by Jacob Kaplan. The tour began at the Riverdale, Ill. plant of global leading steelmaker, **ArcelorMittal**. Steelmaking began at the site in 1918 as Acme Steel Goods Co. of Chicago. Situated along the mainline of the Illinois Central RR and the Little Calumet River, the plant expanded to a workforce of over 1,400 by the mid-1930s. Tour participants were greeted at the plant with an overview of its history and its current focus on the production of higher-carbon steels for consumer goods such as radial saw blades. Participants were taken first to the basic oxygen steelmaking facility of the plant, where ArcelorMittal converts a mix of scrap steel and hot metal (pig iron) transferred from the two blast furnaces of the nearby Burns Harbor plant into steel. SIA members witnessed the brilliant incandescent glow of three oxygen steel converters in different phases of operation. Steel from each of the converters is transferred by rail to the nearby slab casting and hot rolling mill after passing through a ladle metallurgical facility that adjusts the final chemistry of the steel. In the hot rolling mill, tour participants watched as cherry-red slabs were pressed and squeezed through a train of 193 water-cooled rolls before being rolled into coils, ready for shipping.

The F3 tour traveled next to the **Calumet Water Reclamation Plant**, a key facility of the Metropolitan Water Reclamation District (MWRD) of Greater Chicago. The draw of this security clearance-needed tour was a visit to the “Deep Tunnel” pumping station, a cavernous room that houses an array of electrically-driven, 6,000-horsepower pumping systems situated 365 ft. beneath the wastewater treatment plant above. The overarching goal of the MWRD and its Tunnel and Reservoir Plan (TARP) since the 1970s has been to reverse the flow of the Chicago River, in order to move urban waste- and stormwater drainage away from Lake Michigan and to the south. The Calumet TARP pumping station is key to this tremendous task, moving water from reservoirs and stormwater tunnels beneath Chicago to treatment plants before discharging back into the Chicago River basin. Dating from the early 1920s, the Calumet Water Reclamation Plant today can handle a daily intake of 350 million gallons of sewage and only takes eight hours using bacteria to treat wastewater in 15-ft. deep aeration tanks before releasing clean water into waterways.

The tour stopped for lunch at nearby Flatfoot Lake, then headed to the Chicago neighborhood of Pullman, home to the recently created **Pullman National Monument**, a unit of the National Park Service (NPS). Best-known as the home of the Pullman Co., the largest manufacturer of passenger railroad cars in the U.S. from the late 19th into the mid-20th century and more notoriously as the site of a major labor strike in 1894, Pullman is considered by many urban and labor historians to be the quintessential planned company town. During the tour led by NPS rangers, participants learned about the car shops and their assembly-line like operations before visiting some of the major public buildings of Pullman, such as the Hotel Florence. Lastly, SIA members were treated to a brief drive around some of the two-story brick rowhomes built for the thousands that worked and lived at Pullman, many of which are occupied by Chicagoans today.

**Friday Tour 4, Energy Research and the Nuclear Age** attracted those with a penchant for science. Led by Daniel O’Rourke, our first stop was **Fermilab** in Batavia, Ill. Fermilab was founded in 1967, originally known as the National Accelerator (continued on page 16)
Laboratory, with funding from the U.S. Dept. of Energy. In 1974, Fermilab was renamed after Enrico Fermi, a physicist who oversaw Chicago Pile-1, the world’s first controlled, self-sustaining nuclear chain reaction on Dec. 2, 1942.

The tour began in Robert Rathbun Wilson Hall, named for Fermilab’s first director. The impressive Mid-Century Modern style, concrete and glass building features panoramic views of the Fermilab property from the 15th floor. Exhibits in these viewing areas covered the development and function of the Main Injector Particle Accelerator and the former Tevatron Collider, and components of the machinery such as superconducting acceleration cavities. These views also included the interpretive prairie trails, savanna, and bison pasture surrounding Fermilab that are open to the public.

The Tevatron was the second most powerful particle accelerator in the world prior to its decommissioning in 2011. It was shut down after the establishment of the Large Hadron Collider at CERN near Geneva, Switzerland. The Tevatron accelerated beams of protons and antiprotons to 99.999954% of the speed of light around a 4-mi. circumference. The two beams collided at the centers of two, 5,000-ton detectors positioned around the beam pipe at two different locations. The collisions reproduced conditions in the early universe and probed the structure of matter at a very small scale.

Today, Fermilab operates the second-largest particle accelerator complex in the world. The main accelerator complex comprises four particle accelerators and storage rings: the Linac, Booster, Recycler, and Main Injector. Our tour included a close-up view of one the particle accelerator chambers. The Main Injector Particle Accelerator produces the world’s most powerful high-energy neutrino beam and provides proton beams for various research and development programs. Fermilab’s particle accelerators help drive discoveries in fundamental physics, innovations in accelerator science and accelerator-based applications, and the development of spin-off technologies such as advanced cancer therapies, MRI, and superconducting magnets.

Lunch was had at a shaded picnic area within Fermilab Village, a small residential community developed concurrently with Fermilab. Today, the community hosts visiting scientists, and retains much of its original mid-century housing stock.

Our second, and final stop of the day, was at the Argonne National Laboratory in Lemont, Ill. Argonne, chartered in 1946, is also funded by the U.S. Dept. of Energy and is operated by the University of Chicago. Argonne provides laboratory facilities for over 10,000 researchers from academia, industry, and government. Like Fermilab, Argonne traces its history back to the Manhattan Project and the development of Chicago Pile-1. Continued experiments within a major city were deemed too dangerous, so a site outside of Chicago was selected and renamed “Argonne” after the surrounding forest.

Stops at Argonne included viewing the Argonne Tandem Linac Accelerator System (ATLAS) in the Astro Physics department. ATLAS is the world’s first superconducting linear accelerator for heavy ions at energies in the vicinity of the Coulomb barrier. This is the energy domain best suited to study the properties of the nucleus. ATLAS can provide beams of essentially all stable isotopes from hydrogen to uranium. Our tour also included a visit to the nuclear power exhibit in the Nuclear Science and Engineering Building.

Our final stop at Argonne was the Advanced Photon

(continued on page 18)
On July 2, 15 members of the Northern Ohio Chapter (NOCSIA) visited historic Oberlin, Ohio. This town of 8,000 people was founded in 1833 as a devout religious community centered on Oberlin College, a nondenominational Protestant seminary. Oberlin was a hotbed of abolitionism and a haven for freed and escaped slaves. The college became one of the first to admit African-American students in 1835. Oberlin College also became America’s first coeducational university in 1837, and its Conservatory of Music is the oldest in the U.S.

After breakfast at Oberlin Kitchen, an all-day diner in operation for many decades, the group toured AgriNomix, a company producing automation machinery for the horticultural industry. The vast majority of North America’s leading growers of bedded and potted plants use equipment from Oberlin-based AgriNomix. One machine seen on the tour fills flats or pots with soil-like growing medium. Other machines seed, water, stack, and package those flats or pots.

Before lunch, the group toured Oberlin’s Weltzheimer/Johnson House, completed in 1949, one of the few restored Frank Lloyd Wright “Usonian” homes open to the public anywhere in the world. At noon, the NOCSIA group met for lunch at the aptly named “First Church in Oberlin”—the town’s second-oldest existing structure built in 1842. Amanda Manahan of the Oberlin Heritage Center gave a presentation on Oberlin’s industrial heritage.

In the afternoon, the group toured Oberlin’s original schoolhouse (and oldest existing structure). The group also enjoyed guided tours of two adjacent historic homes, including one that served as an informal college dormitory in which a 22-year-old student, Charles Martin Hall, invented the process for making aluminum from ore in 1886. (Hall later founded a company now known as Alcoa.)

For those who chose to stay into the evening, there was a free performance of Shakespeare’s Measure For Measure at the Oberlin Summer Theater Festival.

Ron Petrie, Jim Kenny, and Guy Marentette

Oliver Evans (Greater Philadelphia) toured Independent Record Pressing Co. in Bordentown, N.J. on May 23. The company presses 12-in. vinyl records in a 20,000 sq. ft. warehouse. IRP was co-founded in 2015 in response to the need created by the unexpected 21st-century renaissance of vinyl records, and it started with six Tracey-Val/Hamilton automatic presses that dated to the 1970s. They came from one of the longest-running presses on the East Coast, Hub-Servall Record Mfg. Corp., which closed its doors in 2004.

On June 24, the chapter held its annual meeting, picnic, and a presentation, “Adventures in Steam Locomotion,” by Tom Gears, a steam locomotive engineer at the Wilmington & Western RR in Delaware. Tom has been working with steam-powered equipment since 1981. He talked about documenting working steam locomotives in China, Zimbabwe, Botswana, Paraguay, and Poland and showed photos and video clips.

Roebling (Greater N.Y.-N.J.) hosted a walk in Stanhope, a 19th-c. iron industry and canal port town on June 1. On July 25, the chapter had a custom industrial waterways tour in the Hackensack Riverkeeper’s Eco-Cruise 30-ft. pontoon boats on the Hackensack River, the marshes of the N.J. Meadowlands, and Newark Bay. Numerous industrial sites were viewed during the cruise.

Support Your Local Chapter. For info on a chapter near you or to start one, check out the local chapters section of the SIA website (www.sia-web.org).
Source (APS). The APS provides ultra-bright, high-energy x-ray beams, generated in the storage ring and used for research in many scientific disciplines. The knowledge gained from this research has aided in the development of new pharmaceuticals and pioneering nanotechnologies. The tour included a view of some of the laboratory facilities while in use. We finished our day at the top floor in the APS central laboratory/office building with a view of the storage ring and the surrounding campus.

Sunday Tour 1: Calumet River / Indiana Harbor Canal Boat Tour. A boatload of hardy SIA members and guests boarded the MV Free Spirit at Crowley Marine in South Chicago for a cruise along the Calumet River and the Indiana Harbor Canal. The Free Spirit is a 100-ton, 70-ft. former yacht built in 1974 and presently owned and captained by Joe Donofrio.

Although visibility was limited because of occasional rain and fog, no complaints were heard. Right off the bat members were treated to the passage of the freighter Algoma Innovator, a self-unloading bulk carrier, which delayed our departure to the dismay of none as we crowded the starboard side to watch her squeeze through the Calumet Channel and raise the railroad lift bridges.

The Free Spirit then shoved off and headed to the open waters of Lake Michigan and Indiana Harbor where the remnants of former steel mills beckoned. At one time this great industrial heartland port area was home to the booming mills of Inland Steel, Republic Steel, then LTV Steel, and all the necessary support industries. Now only successor ArcelorMittal remains. Along the way the Free Spirit passed beneath the opened, double-leaf trunnion bascule bridges for Ewing Ave. and the 95th St. Bridge of “The Blues Brothers” fame, as well as the 130th St. Bridge on Torrance Ave. A great number of grain elevators (defunct) could be seen as well. A deer going for a swim in the canal was another memorable site.

We passed beneath the permanently opened and no longer used railroad lift bridge marking the beginning of the site of the former South Works of the U.S. Steel Corp. (visited by SIA members on Tour T1) on the north bank and opposite the active terminal of Iroquois Landing, one of two dock facilities of the Illinois International Port Authority.

As we entered Indiana Harbor, the huge industrial complex surrounding the harbor began to take shape. Industrial facilities here were built out into the lake on slag landfills covering about 6 sq.-mi. Beside newer piles of slag waste were rusting mill buildings, some idle and others making steel. An ArcelorMittal steel mill is west of the harbor. To the east are coke-making operations. Entering the ship canal, open space occupied both sides of the canal, an indication that some unused mill buildings had been removed.

A few sights fell prey to the foggy weather, including the Horseshoe Casino and Lever Brothers (now Unilever), makers of such popular soap brands as Dove, Lifebuoy, and Lux. Fortunately, near the end of the cruise we were treated to river views of Acme Steel (with its bright yellow piles of sulfur), at 135th and Perry Ave., and the Ford Motor Co. plant at 130th and Torrance, Ford’s oldest continuously operating plant, having opened in 1924. It still produces the Ford Explorer and the Lincoln Aviator.

Sunday Tour 2, Chicago River Bridges Walking Tour focused on the history, architecture, engineering, and human drama of Chicago’s bridges. Patrick McBriarty, author of Chicago River Bridges, led the tour, which also included a stop at the McCormick Bridgehouse & Chicago River Museum.

The SIA extends special thanks to the organizations and companies that opened their facilities to us and those that sponsored parts of the conference. The SIA also thanks the Chicago Conference committee, the Paper Sessions committee, and the many volunteers who helped to make Chicago 2019 a memorable and successful event.

With contributions by Mark Brown, Aron Eisenpress, David Farrier, Jacob Kaplan, Matthew Kaplan, Tom Koller, T. Arron Kotlensky, Richard Lanyon, William McNiece, Saleh Miller, Steve Muller, John Reap, Joe Seely, and David Wohlwill.

Drill bits at S&C Electric Co. used in an automated drilling machine.
IA EXHIBITS

Golden Prospects: California Gold Rush Daguerreotypes is an exhibition at the Nelson-Atkins Museum of Art (Kansas City, Mo.) through Jan. 26, 2020. The exhibition provides a critical look at the California Gold Rush through the lens of the daguerreotype camera. In San Francisco and Sacramento, urban panoramas, street views, and studio portraits of miners were made. Outside these cities, gold towns were established and abandoned around gold strikes, and mining technology transformed the landscape. Gold rush daguerreotypes provide a view into the transformation of the American West: the evolution of mining technology, the growth of cities and towns, and the diversity of people who participated in these activities—while revealing a high level of technical and artistic accomplishment. Info: nelson-atkins.org.

IA ON THE WEB

A Field of Dreams in the Sky. Long Island History Project Episode 94: The Bayport Aerodrome with Bob Mott and Walter Winnicki. http://www.longislandhistoryproject.org/a-field-of-dreams-in-the-sky/. A podcast featuring Walt Winnicki, who learned to fly on Long Island in the early 1950s, and Bob Mott of the Bayport Aerodrome Society, who is trying to preserve that history. The two men discuss the lost world of private airfields and the near-miraculous survival of the Bayport Aerodrome, built by Curtis Davis out of his family’s corn field following WWII.


Second SIA Membership Survey Coming in October

As SIA continues efforts to improve our Society, the membership committee has contracted with a professor of marketing at Michigan Tech to run a formal follow-up survey to the one we ran in 2018. That survey was answered by just under a third of our membership, and this one will quantify some of the trends we observed. It is specifically designed to measure satisfaction levels with regard to our membership benefits and activities so that we both know how to improve what we are doing and how to market ourselves to potential new members. A separate survey will also be going out to non-members to gauge their perceptions of what we already do.

All current SIA members are eligible and encouraged to participate in this survey. The link to the survey will be sent to your email address on file with the Society on Oct. 1, 2019 and the survey will close on Oct. 20. Fifteen participants who complete the survey will be chosen at random to receive an Amazon gift card. So watch your email and please take a moment to help SIA better understand its members.
Salt Creek, the last remaining covered bridge in Muskingum County.

SIA colleagues admire David for his ability as a facilitator for preservation efforts. One wrote: “He has made an outstanding career encouraging, facilitating, and advocating for the preservation of covered bridges, metal truss bridges, and concrete bridges in his home state and beyond. He’s often been the person who brings the right people together at a community level to achieve a good preservation outcome.”

Another added: “His influence extends beyond Ohio. About twenty years ago, residents of Great Falls, Mont., invited a team of bridge experts that included David, Eric DeLony, Pat Malone, and Fred Quivik to speak at a bridge symposium that became a rallying event to preserve the 10th Street Bridge—a magnificent multi-span, open-spandrel, concrete-arch bridge over the Missouri River. David helped strategize how to move forward. The bridge was saved, and the Great Falls folks have done wonderful things with it.”

The General Tools Award is for contributions other than academic publication, but appearing in print is not a disqualifying factor. WorldCat credits David with at least 25 works in more than 30 publications. He is co-author with Bill Heisel of Ohio Historic Bridge Guide: A Traveler’s Directory to the Historic Wooden, Metal, Stone, and Concrete Bridges of Ohio, which has gone through seven editions since it was first published in 1989, and more recently with Miriam Wood and William Michael Miller of Covered Bridges: Ohio, Kentucky, West Virginia (2007). He contributed his editorial talent to Covered Bridges and the Birth of American Engineering, published by the Historic American Engineering Record in 2015.


Many of us know David through his presentations at SIA conferences, where he combines thorough research and deep insight with killer deadpan humor. He also organized the 1996 Fall Tour, based in Columbus, and last year’s Fall Tour, based in Dayton. Some of you may remember the 1996 tour for its outstanding process tours, including Union Fork & Hoe, Timken Roller Bearing, Berry Brothers Bolt Works, and American Whistle, the only manufacturer of metal whistles in the U.S. We were all tweeting and twittering as we left the small factory. Not surprisingly, David anticipated SIA members’ fondness for new toys and accepted it all with a wry sense of humor. Later, when one of the buses got stuck in the mud at our banquet site on Staley Farm, an old tractor lumbered into view to pull the SIA out of a sticky situation. David in his gracious way had it all under control.

David earned Bachelor’s and Master’s degrees from Miami University. His LinkedIn profile notes that he started as a music major, before crossing over to the dark side and becoming a history major during his sophomore year. I think that music’s loss has been IA’s gain and invite you all to join the committee in recognizing David A. Simmons as this year’s General Tools Award recipient.

Minutes (continued from page 5)

cutoff date for the hotel reservations is Aug. 27. The optional Thursday tour will visit Donner Pass and includes the 1911 Verdi hydro-electric plant. Friday tour sites include the Nevada State Railway Museum in Carson City, Kimmie Candies, AVK valves, Lahontan Dam and Powerhouse, and others in progress. Saturday will cover the historic Comstock area, and the Sunday optional tour will be on the Virginia & Truckee RR.

Mike Piersa reported that planning for the 2020 SIA Conference in the Lehigh Valley of Pa. is well under way. The conference will be hosted by the National Museum of Industrial History, the Delaware & Lehigh National Heritage Corridor, and the Anthracite Heritage Museum (Pa. Historical and Museum Commission). The conference is planned for May 28–31, 2020, with additional activities in the days before and after the conference. The Lehigh Valley region is 1.5 hours from both Philadelphia and New York City. The conference will be based out of the Historic Hotel Bethlehem in Bethlehem, Pa. The committee is working on process tours that may include industries as diverse as cement, slate, coal, steel, railroads, truck manufacturing, and materials testing. Historic sites will also be visited, some of which are museums, while others are adaptive reuses and still others are ongoing restoration projects such as the steam-powered pump house in nearby Phillipsburg, N.J., which was the subject of one of the 3:30 p.m. “Monster Energy” presentations. We look forward to seeing everyone in the Lehigh Valley next year.

President Marston made a plea for volunteers to help with future tours and conferences. He said it is a challenge to plan two events every year. There is help available to any local organizing committee from Courtney and the board. The next date available is fall 2020.

Membership Committee. Mark M. Brown reported: “In the past year, the Board renamed ‘Joint’ memberships to self-defined ’Household’ memberships and established a policy where the membership of those joining after the annual meeting will extend through the following calendar year. In other words, if someone asks about your SIA t-shirt on your return trip and they sign up, they will be in good standing through Dec. 31, 2020. The Board also commissioned a follow-up to last year’s online members survey.
from an MTU marketing professor and student at the cost of $2,300. The Marketing / Historian cultural gap, among others, has been a challenge. We are looking for feedback by January. I regret to report that the non-renewing members' survey faced several setbacks, but the sub-committee plans to regroup and try again this year. Looking to the coming 12 months, the board has asked the Membership Committee to bring in the marketing survey; offer a new member discount to folks who purchase an IA article from JSTOR; investigate ways and means for publicity and social media campaigns around annual meetings and fall tours. It took many members to get us this far. I invite the Membership Committee, the Non-renewing Member Survey Committee, and those on the Marketing Study Working Committee to stand or identify themselves. With their help and yours, there will be even better news next year."

**Eric DeLony Industrial Heritage Preservation Grants.** Committee Chair Duncan Hay reported: “SIA started awarding grants to support industrial heritage preservation projects in 2004. Since then, the Society has awarded more than 40 grants to support projects in 16 amounts ranging from $1,000 to $3,000. Last year, the program was renamed to honor former HAER Chief and long-time SIA member Eric DeLony. This year’s selection committee included Paul White, Suzanne Wray, and me, with support from Daniel Schneider at SIA headquarters. We received nine applications and recommended one to the Board for funding at the $3,000 level. The Board ratified that recommendation at Wednesday's meeting, and I am pleased to announce that SIA will be awarding a grant to Newlin Grist Mill in Glen Mills, Pa.

Newlin Grist Mill was constructed in 1704 and continued to operate commercially until 1941. It was restored and opened to the public as a museum in 1960. The historic water system has been a character-defining feature of the mill site and a critical component in the operation of one of the oldest working water-powered grist mills in the U.S. There is evidence of three centuries of change in the water system and its structures.

The spillway gate, which protects the mill and millrace from excess water, has deteriorated to the point where they can no longer operate the mill without causing sinkholes and additional damage to the structure. Water is leaking underneath and around both sides of the gate masonry, further undermining the structure. The gate is in a heavily utilized public area of the park, and its deterioration may constitute a public hazard.

The spillway gate is one of the few elements of the water system that has not been previously documented and/or restored. It may contain elements that date to the mill's original period of construction. This project will contribute to the organization's understanding of the evolution and design of the water system and guide restoration efforts to ensure historical accuracy and stability of the structure.

Archeology students and faculty of West Chester University will do much of the work as part of a field school. The $3,000 SIA grant will help pay for a professional draftsman to prepare final drawings. It will be matched by a $4,500 cash match and about $5,700 worth of in-kind labor.”

Committee Chair Hay closed with a request for members to help get the word out about SIA's grant program.

**The International Committee for the Conservation of the Industrial Heritage (TICCIH).** President Marston noted that SIA TICCIH Representative Bode Morin was not able to make it to Chicago, but we have the President of TICCIH here instead. He then asked Miles Oglethorpe to say a few words. Miles noted that it has been 10 years since his last visit, and the heritage seen in Chicago and presented at the sessions is amazing. He said it’s also been a great experience meeting people. He congratulated SIA's Pat Martin for his extraordinary three-term contribution as TICCIH President. With Bode's support and Pat as Life President, he hopes to tap into the U.S. expertise in IA.

**Student Scholarships.** Committee chair Patrick Harshbarger reported: “Each year, the SIA offers travel scholarships to assist students offset costs associated with attending our conferences. The application is simple, consisting of a letter of interest from the student and a reference from a faculty member familiar with the student and the SIA.

The scholarship program has existed for 30 years, and many former recipients have become long-term members and contributors to the organization. Scholarships are made possible by donations to a dedicated fund. A huge thanks goes out to everyone who made a contribution this year. I think you all recognize how financially difficult it can be for students these days to attend conferences. Keep the donations coming, and if you know of any students please encourage them to apply next year.

On behalf of the SIA Student Scholarship Committee, consisting of Scott See, Suzanne Wray, Seth Price, and myself as chair, I am pleased to announce this year's recipients, each of whom will receive an $800 award.

Siobhan Osgood is a Ph.D. student at Trinity College, Dublin, Ireland. She is currently completing a dissertation on the architecture of Ireland’s Great Northern Ry., building on an already impressive record of publications and social media posts on Irish railway architecture.

Maria Gimenez Prades is a Ph.D. student at the Complutense University of Madrid, Spain. She is currently conducting independent research with the IA program at Michigan Tech related to her interest in the adaptive re-use of industrial buildings and structures. Specifically, her dissertation is on the Aliaga Thermal Power Plant in Teruel, Spain.

Both Siobhan and Maria gave papers prior to lunch at the World Heritage paper track. If I could ask Siobhan and Maria to approach the podium, we will present them with their checks and take a photograph for the newsletter. Please give Siobhan and Maria a warm welcome.”

(continued on page 23)
Publications of Interest (continued from page 12)


◆ Benjamin Mollenhour. The “Scrambling” Mystery Behind Ol’ 55. SCA Journal, Vol. 37, No. 1 (Spring 2019), pp. 30–31. Brief history of the carnival ride, usually referred to as the Scrambler or a “merry-go-round of the whip type.” The ride debuted in 1938 at the Southeastern Fair in Atlanta, Ga., and was patented in 1940 by its inventor Richard Hillman Harris. Harris sold his patent in 1954 to the Eli Bridge Co., which had been founded in the late-19th century as a bridge fabricator and was a builder of Ferris wheels since about 1900. The company manufactured its first scrambler in 1955 with the serial number #055 and soon had more than 200 standing orders. The original #055 remains operational and is located at Family Fun Park in Cape Coral, Fla.

◆ Ivan Steen. New York’s Crystal Palace. New York Archives, Vol. 19, No. 1 (Summer 2019), pp. 19–23. The construction of the hall for the 1853 “Exhibition of the Industry of All Nations” was a challenge to New York, including surpassing the city’s ability to provide enough cast iron for the structure. In the end, the show was an economic failure to investors even after P.T. Barnum was hired to promote it, but it helped increase the prestige of New York City.


Bridges

◆ Fred Braerman and Maurice Agostino. Rehabilitating Maryland Route 195 (Carroll Avenue) Bridge over Sligo Creek. Aspire: The Concrete Bridge Magazine (Spring 2019), pp. 12–14. Description of a successful $9.5 million-project to rehabilitate a historic three-span, 220-ft.-long, open-spandrel, reinforced-concrete arch of 1932. The bridge is located in Takoma Park, Md. The plans were painstaking in reconstructing details of the existing bridge since spandrel columns and deck material above the arches were so deteriorated they needed replacement.

◆ David A. Simmons [SIA] and William E. Bowser. The Black Covered Bridge (35-09-03): A Curious Legacy. CBT, Vol. 77, No. 3 (Summer 2019), pp. 3–16. A detailed analysis and interpretation of the history and alterations to a covered bridge over Four Mile Creek, located just north of Oxford, Ohio. Erected in 1868, the bridge began as a single 200-ft.-span but soon sagged and was converted to two spans. The truss pattern bears similarities to Long and Child trusses yet lacks the full characteristics of either pattern.

Power Generation


Misc. Industries


Abbreviations:

CBT = Covered Bridge Topics, published by the National Society for the Preservation of Covered Bridges
NYT = New York Times
SCA = Society for Commercial Archeology
WSJ = Wall Street Journal

Publications of Interest are compiled from books, articles, and digital media brought to our attention by you, the reader. SIA members are encouraged to send citations of new and recent books, articles, CDs, DVDs, etc., especially those in their own areas of interest and those obscure titles that may not be known to other SIA members. Publications of Interest, c/o Marni Blake Walter, Editor, SIA Newsletter, 11 Esty Rd., Westmoreland, NH 03467; sianeditor@siahq.org.
Chapter Recognition. Chapter Liaison Arron Kotlen-sky encouraged local chapters to come talk to him because the national SIA wants to do more with the chapters. He then read the traditional roll call of chapters.

Vogel Prize. Committee chair Arron Kotlen-sky read the Vogel Prize citation and presented the award to Steven Walton (see article in this issue).

General Tools Award. Committee chair Duncan Hay read the General Tools Award citation and presented the award to David Simmons (see article in this issue).

Recognition to Outgoing Board Members. President Marston thanked Suzanne Wray and Paul White for their service on the Board of Directors and called Mike Raber to the podium.

Nominations Committee. Nominations Committee Chair Mike Raber read the election results: “For the 2018–2019 cycle, the Nominations Committee consisted of Mike Raber (Chair), John Mayer, Ian Hay, and Past President Maryellen Russo. From Dec. 2018 through Jan. 2019, the committee received suggestions and assistance from President Christopher Marston and Secretary James Bouchard. The committee particularly thanks Maryellen for her early pursuit of candidates, which yielded two of our three candidates for the Board. The ballot deadline was Wed., May 29, 2019. We received approximately 245 ballots, which was about 10 more than received last year, and represented about 20% of the total SIA individual and institutional membership. The committee chair has suggested that the Board consider optional electronic voting in addition to paper ballots to increase members’ participation in these elections and general engagement with the Society.

The committee thanks everyone who ran, as well as newsletter editor Marni Walter who coordinated the call for candidates and slate announcement, and business manager Daniel Schneider at SIA Headquarters who oversaw the lay-out and production of the ballots. Even those who ran unopposed had to campaign with themselves to continue their commitments to the SIA. The election results were Nanci Batchelor for Treasurer, James Bouchard for Secretary, Bob Newbery and Seth Price for Board of Directors, and Diana Bouchard for the Nominations Committee.

On behalf of the Society, the committee welcomes the new officers and encouraged the runners-up to consider running in the future. The 2019–20 Nominations Committee will be John Mayer (Chair), Ian Hay, Diana Bouchard, and Maryellen Russo (Past President). In 2020, the Society will elect a Vice President, three directors, and one Nominations Committee member. The outgoing Nominations Committee chair encouraged the membership to consider running for these positions.”

New Business/Announcements. President Marston asked for the newly elected officers to meet immediately after lunch.

Adjournment. At 1:56 p.m. Central Time, Marston asked for adjournment, which was moved by Saul Tannenbaum and seconded by Fred Quivik.

Minutes (continued from page 21)

Two Student Scholarships were awarded this year and recognized at the SIA’s Annual Business Meeting.
From left to right: Siobhan Osgood, Student Scholarship Committee Chair Patrick Harshbarger, and Maria Gimenez Prades.

CONTRIBUTORS TO THIS ISSUE


With Thanks.
**CALENDAR**

**2019**


**2020**


June 10–15: Mining History Assn. Annual Conference, Elko, Nev. Elko County is one of Nevada’s oldest mining regions, and today serves as the hub to the Carlin Trend, the richest gold mining region in the world. Tours and paper sessions. Info: www.mininghistoryassociation.org.