

KANSAS CITY SIA 45th Annual Conference Review

early 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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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

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.

TO CONTACT THE EDITOR: Patrick Harshbarger, Editor, SIA Newsletter, 305 Rodman Road, Wilmington, DE 19809; (302) 764-7464; e-mail: *phsianews@aol.com*.

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 jetengine 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



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 stateof-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.

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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, selfdescribed "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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Test cells at the Pratt & Whitney aircraft engine factory.



The vast underground landscape inside Subtropolis.

Steve Walton

Patrick Harshbarger

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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



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



Looms and line-shafting inside the Watkins Woolen Mill.

Patrick Harshbarger

Sean Gohman—2016 Vogel Prize Recipient

Harshbarge

Patrick

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

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



12th Street Viaduct.

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.



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



John Reap

Aging racks at the Rieger Distillery.

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 throughtruss bridge with a traditional tower-based vertical lift design to accommodate river traffic. The railroad line being

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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,

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SIA group at the main entrance to Tension Envelope.



Starch processing room at Faultless Starch.

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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 distributers 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 wellknown 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 railroadthemed 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.