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Obituary: Eric Delony (1944-2018)
By Christopher Marston

Historic Bridge Preservationist Eric N. DeLony (1944-2018), who served as Chief of the National Park Service’s Historic American Engineering Record (HAER) from 1987 to 2003, died on October 23, 2018, after a long struggle with Alzheimer’s disease. Over his career, Eric became known as a pioneer in historic bridge documentation and preservation and one of the nation’s leading experts in historic bridges. In recognition of his achievements, Eric was the recipient of the 2000 General Tools Award, the highest honor bestowed by the Society for Industrial Archaeology.

After graduating from the Ohio State University in 1968, Eric was first hired as a summer architect on the New England Textile Mills Survey, a joint project of the Smithsonian (under the leadership of Robert Vogel) and the Historic American Buildings Survey (HABS). The following year he became a member of the Mohawk-Hudson Area Survey, HAER’s very first field team. This ambitious project documented several industrial sites and bridges in the Albany area, and team members were challenged to devise new recording techniques for manufacturing and engineering structures. His detailed drawing of the Troy Gasholder remains the logo of the Society for Industrial Archaeology to this day. Once he completed his Master’s in Historic Preservation at Columbia University under James Marston Fitch (where he first met his lifelong friend and colleague, preservation educator Chester Liebs), Eric was hired as HAER’s first full-time employee in 1971. HAER began recording a variety of bridges and other industrial structure types as part of state inventories and themed surveys. These included surveys of the Baltimore & Ohio and Erie railroads, Paterson and Lowell mill towns, and later mining, steel, power, and maritime-related sites, among others. Eric also helped initiate “SWAT teams” to record endangered structures prior to demolition. By 1987, Eric DeLony had been promoted to Chief of HAER.

In collaboration with Emory Kemp of West Virginia University, Eric began developing the HAER Historic Bridge Program in 1973, which would become the first comprehensive national program to identify and protect historic bridges. Through Eric’s efforts, HAER developed partnerships with the National Trust for Historic Preservation (NTHP), the Advisory Council on Historic Preservation (ACHP), and state historic preservation offices (SHPOs). The first goal of the program was to promote comprehensive historic bridge inventories in each state. When inventories were required by law in 1987, Eric’s initiative became a catalyst in making highway bridges the first class of historic structures to be nationally evaluated. After the preliminary state bridge inventories were completed, HAER partnered with state departments of transportation (DOTs) to undertake HAER summer documentation projects that would more intensively document representative bridges, with the first taking place in Ohio in 1986. Using funding from a variety of partners like the Federal Highway Administration (FHWA), DOTs, and historic groups, HAER recording teams collaborated with national and local experts to produce large-format photographs, histories, and drawings of hundreds of historic bridges in Arkansas, Illinois, Iowa, Massachusetts, New York, Ohio, Oregon, Pennsylvania, Texas, and Washington, from 1987-2001. Eric also worked with engineering professors such as Dario Gasparini at Case Western, Stephen Buonopane at Bucknell, and Ben Schafer at Johns Hopkins to hire students to compile detailed engineering analyses of a variety of historic bridge types, going beyond traditional architectural history reports. In appreciation of Eric’s initiatives, the White House and ACHP presented HAER’s Historic Bridge Program with a National Historic Preservation Award in 1992.

In addition to the nation’s highway bridges, the historic roads and bridges in the National Park system were also deteriorating from neglect and overuse. HAER developed a pilot project in the National Capital Region of the National Park Service (NPS) in 1988 to survey the historic and significant transportation-related structures and designed landscapes at various NPS units. With support from FHWA and NPS, this program expanded in 1989 and continued until 2002 to document the roads and bridges of large western national parks, national battlefields, and eastern parkways. HAER also partnered with New York and Connecticut to record several historic local parkways. The drawings of these projects are compiled in America’s National Park Roads and Parkways: Drawings from the Historic American Engineering Record (Baltimore: Johns Hopkins, 2004).
Eric DeLony was also influential in HAER’s involvement with a third major initiative involving FHWA and historic bridges. Realizing that covered bridges were a beloved but endangered resource, Vermont Senator James Jeffords proposed legislation to save them. The resulting National Historic Covered Bridge Preservation (NHCBP) Program was established by FHWA in 1998 as part of the TEA-21 transportation bill. HAER received research funding beginning in 2002 to document the nation’s most significant covered bridges, as well as developing other educational initiatives including engineering studies, a traveling exhibition, national conferences, and National Historic Landmark nominations. With the benefit of continued FHWA support, HAER Project Leader Christopher Marston has continued Eric’s vision and is in the process of finalizing several research projects. These include the 2015 publication **Covered Bridges and the Birth of American Engineering**, co-edited with Justine Christianson, and dedicated to Eric DeLony. Rehabilitation Guidelines for Historic Covered Bridges will be published later in 2018.

Eric was a long-time member of the Society for Industrial Archaeology (SIA) and developed the SIA Historic Bridge Symposium beginning in the early 1980s to allow experts to share research and preservation experiences. Eric attended his last one in 2011; the 25th was held in 2016 in cooperation with the Historic Bridge Foundation in Kansas City, Missouri. He was also an active participant with the Transportation Research Board (TRB)’s Committee on Historic Preservation and Archaeology in Transportation (ADC50) beginning in the 1990s, which was comprised of professionals from state DOTs, SHPOs, and consultants involved in preservation issues on federally funded transportation projects. Research and best practices on preserving and maintaining historic bridges was always a major focus of the committee. As a subcontractor to Parsons Brinckerhoff, Eric DeLony co-authored *A Context for Common Historic Bridge Types* with Robert Jackson, for the National Cooperative Highway Research Program (NCRPR Project 25-25, Task 15) in 2005. Not satisfied to just record historic bridges, Eric was also determined to see as many bridges as possible saved and preserved. Some of the projects that Eric championed included: the 1828 Blaine S-Bridge and the 1868 Zoarville Station Bridge in Ohio; the 1869 Henszey’s Bridge in Pennsylvania; and the 1858 Aldrich Change Bridge in New York. As Ohio DOT’s Tom Barrett reflected, “Through Eric’s encouragement, I feel that the historic bridge inventory in Ohio has stabilized and improved in many ways. We strive to explore all plausible alternatives to demolition and find ways to educate everyone on proper rehabilitation and design solutions. Hard-fought successes here and nationwide in bridge preservation will always be a part of Eric’s legacy.”

Eric’s advocacy extended beyond bridges to roads as well. As Preserving the Historic Road conference founder Paul Daniel Marriott stated, “Eric appreciated that roads and bridges were intertwined. He was one of the first people to acknowledge that historic research and advocacy were needed for historic roads. Eric DeLony was instrumental in establishing the historic roads movement.”

Eric studied at Ironbridge with Sir Neil Cossons in 1971-72 as a Fulbright Scholar, and this experience led him to encourage collaboration between HAER and industrial archaeologists and preservationists in Europe and other countries. Eric consistently hired International Council on Monuments and Sites (ICOMOS) foreign exchange students for his summer field teams beginning in 1984. He represented the United States at several meetings of the International Committee for the Conservation of the Industrial Heritage (TICCIH). He also worked with several prominent European scholars, such as Barrie Trinder at Ironbridge and Louis Bergeron at Le Creusot, on various publications, exhibitions, and conferences.

Another issue that Eric championed has finally shown dividends; after several decades, the U.S. delegation finally nominated the Brooklyn Bridge as a UNESCO World Heritage Site in 2017.

**Post-career Legacy**

After retiring to Santa Fe, New Mexico, in 2003, Eric became a bridge preservation consultant. Maintaining “The Pontists” email list, he advocated for various bridge preservation causes and initiatives, and continued to write and teach. An avid collector of rare books, technical reports, and images of historic bridges, Eric donated his collection to two prestigious archives. The “Eric DeLony Collection of the History of Bridges and Bridge Construction” was established in 2010 at The Huntington Library in San Marino, Calif. In 2013, the Linda Hall Library in Kansas City, Missouri received the “Eric N. DeLony Engineering & Bridge Collection.”

After health issues removed him from public life, Eric continued to receive various honours acknowledging his legacy. Beginning in 2014, David Wright of the National Society for the Preservation of Covered Bridges established the Eric DeLony Scholarship, an annual prize awarded to a college student interested in historic preservation. Eric was also a recipient of the 2016 Othmar H. Amman Award for Lifetime Achievement from The Bridgehunter’s Chronicles. Eric DeLony was truly a pioneer in the world of historic bridge documentation, preservation, and advocacy. The 3,000+ bridges in the HAER Collection at the Library of Congress, and hundreds of examples of preserved historic bridges across the country are all a testament to his lifelong determination and passion for saving historic bridges.

**Clacton on Sea & Peter Schuyler Bruff**

By Ian Anderson

The first attempt at developing Clacton as a seaside resort was made by a Colchester developer named Sargent Lay in 1830, but the land belonged to a farm called Sea Side House Farm (on the corner of now Station Rd & Rosemary Rd). The land was held in trust in the names of Mr & Mrs William Watson, which prevented its purchase by anyone with a view of development. However, in 1864 the trust expired with the death of William Watson. The land was divided into plots and put up for auction by the estate’s...
executors in April 1865. Before this occurred Peter Schyler Bruff bought the 47 acres of land by private treaty with the intention of turning the area into a seaside resort.

In 1866 he sought Parliamentary approval to extend his Tendring Hundred Railway between Colchester and Walton on the Naze, to Clacton on Sea, with a new station 50 yards from the cliffs, plus a new pier to enable paddle steamers to land visitors. Royal Assent to the Thorpe and Great Clacton Railway & Pier Act was received on 16th July 1866. Clacton was only about five miles from Weeley station, but at that stage there was insufficient investment interest in a new railway branch to the coast. The pier and railway had to be built within five years, after which the powers would lapse. The pier would be built but not the railway, which eventually open in 1882.

At that time, Bruff’s capital was tied up with other projects, so he was unable to do anything until July 1870, when he had a meeting on the beach with William Parry Jackson, chairman of the Woolwich Steam Packet Co, which ran paddle steamers from London along the East coast. Jackson agreed to finance Bruff’s scheme in return for the exclusive right to land visitors at Clacton from his paddle steamers. Bruff went ahead with his design for a new pier. In preparation, Bruff had Pier Gap cut through the cliffs in 1870. On 18 July 1871, just as the five-year limit of the 1866 Act was about to be reached, the first building in the new town of Clacton Sea, the new 480ft long by 12/16ft wide pier, was completed, materials being delivered by sea. The steamer Queen of the Orwell called on its way to Ipswich. The pier was officially opened on 27 July when the large steamship Albert Edward brought the directors of the Woolwich Steam Packet Co & Peter Bruff, plus about two hundred lady & gentlemen guests, from London Bridge Wharf to Clacton, not that there was anything to see apart from the beach and fields upon which the future resort was to be built. Assembled at the pier head were between 700 & 800 spectators from surrounding villages and Colchester.

Also in July 1871 Bruff published his provisional resort layout, a development plan for the “Intended New Watering Place called Clacton-on-Sea”, the footprint of which is still evident today. A symmetrical street layout on the cliffs was divided into blocks. Each side of Pier Gap were pleasure grounds on the cliff with two further greenswards left & right, and an upper promenade. Marine parade ran with semidetached villas facing the sea. The spine was Main Approach, which ran inland from the pier, later Pier Avenue, on which west side were to be shops, a library, bazaar and lodging houses. On the east side would be a hotel and more lodging houses. Also included were open spaces with blocks behind for housing. The plans could not extend to the cliff top land, which as late as 1872 was still held by the Trustees of C G Round who also owned extensive farmland west of the town site. Bruff soon acquired this cliff top land allowing access through to create the road link to the pier. The overall intention was to cater for a middle class clientele.

Having a pier and assured finance from the Woolwich Steam packet Co, Bruff and the company directors began development of the resort. The Clacton on Sea Hotel Company Ltd was announced in newspapers in November 1871, to buy land and build the Royal Hotel. The most prestigious location was for the construction of the Royal Hotel which was opened in July 1872, with only bare cliffs each side. Bruff created a deed of mutual covenants in order to encourage high-class building to provide the rates necessary for the new resort’s infrastructure, with plans & responsibilities as developer for roads, sewers, pleasure grounds, promenades & other works, including fencing, pavements & lighting.Clauses prevented plots being used for commercial purposes, as well as compelling sewer connections to protect the water supplies from contamination. Covenant restrictions were placed to remain until a local Board of Health or other authority took over control. Bruff also designed the town’s wide street layout, which remains today. All this effectively made Bruff a one-man authority.

Development was slow, but the core of Clacton was developed in the 1870s. However, by 1877 Bruff had realised that he could not control it all and sold the remaining land, 37 acres, and covenants to the newly formed Clacton on Sea General Land, Building & Investment Co Ltd (Land Co). As well as other land, the total Land Co. portfolio was 213 acres, which dominated further development, although Bruff’s principal aims had been achieved. Other local landowners gradually sold to developers who laid out their estates so that Clacton had become a busy resort by the mid-1880s.

Clacton’s first sewers were provided by Bruff from 1872, with sewage collected from each property into glazed drains thence to an intercepting chamber in a sluice house in the cliffs, where the sewage was deodorised and discharged at high tide from a sluice at Eagle gap. By 1878 the outfall was ineffective, overflowing on to the beach, leading to a new scheme in 1879 by Henry Ough, which was completed in 1884 with an outfall to the sea. This again proved inadequate, again overflowing to the beach, promenade and Anglesea villas in the early 1890s. Finally, in 1893 a system was created in Great Clacton in 1893 and in the town around 1895, relocating the sewer away from the centre with an outfall 1000ft out to sea.

In 1875 powers were obtained by a Provisional Order under the General Pier and Harbour Act, 1861 to extend the pier by 170yds, built in 1877. Included was a shelter at the head, protection works and two berthing arms to allow landing passengers from steamships at all tides. A lifeboat station was added in 1878. By 1885 a further extension increased the stem to 1280ft with a head of 300ft. The width was increased to 30ft in 1891-92 and an octagonal pavilion theatre added 1892. Land Co added shops to Pier gap in 1887. In 1893 the pier was extended to 1180 feet, designed by Kinipple & Jaffrey. The work incorporated a polygonal...
pier-head, an impressive regency styled polygonal pavilion to match, a concert hall, refreshment rooms and a waiting room. Further extensions to the pier by Ernest Kingsman in the 1920s and 30s brought the pier to its current state, publicised in the 1920/30s as No. 1 North Sea, which is its address today.

The Venetian Bridge
Clacton UDC bought Pier Gap from the Land Co in 1913 and prepared a scheme to demolish the shops, landscape the gap and construct a 60ft span reinforced concrete Venetian or Rialto Bridge to link East & West Cliffs. Built by Clacton UDC under Council Surveyor Bowe’s supervision it opened in May 1914.

The former Royal Hotel
The Royal Hotel, Clacton’s first building, lay unloved for some years after closure in 1994, and was auctioned off in 2010 for £850,000, but development was unsuccessful at that time. Subsequently it has been redeveloped as a successful J D Wetherspoons pub, the Moon and Starfish, with hotel rooms on the first floor and residential apartments on the top floor. 2017 it was announced that a £4 million improvement and refurbishment programme would be carried out to make Clacton Pier an all-weather 52 weeks a year attraction. The 2,500 reinforced concrete columns and beams were showing signs of chloride attack from years of salt laden sea water and needed refurbishment. Repairs on the east side began in July 2017 using a Flexcrete concrete repair system applied by the Clacton Pier Company’s own Maintenance Team after training at Flexcrete’s head office. Initially 500 piles will need repairs, but it is expected that this works will continue over the next few years. In January 2018 a new £75,000 transformer was added, which will provide all the required electrical power, replacing the previous 1930s power supply. The two new main features added are the £500,000 Skull Point indoor and outdoor Adventure Golf Course on two levels, as well as the children’s £500,000 Discovery Bay Adventure Play and Galley Family Restaurant. Also to be added are new dodgems at first floor level, a new food and drink section, Seaquarium enhancements, a large events space for winter events and an enlarged amusement arcade. Work on the Adventure Golf Course and dodgems began in March 2018, as well as replacing the roofing panels over the main concourse including the 1930s Lamella roof. All the facilities were opened in July 2018.

World’s Largest Elevated Water Tank undergoes Rehabilitation
By Parthajit Patra, CEng FICE and Ayanangshu Dey, PhD, CEng FICE

The elevated water tank at Tallah (just on the northern fringe of Kolkata or Calcutta) is the largest elevated water tank made of riveted steel and supported on steel columns. It was erected in 1911 and has served the city for over a century and is currently undergoing rehabilitation and retrofitting. The capacity of this tank is 9 million gallons (almost 41,000 m3) with a staging height of 27.9 m. It can hold more water than that required to fill up 16 nos. standard size Olympic swimming pools. This square tank measures 98 m on one side with 6 m depth and is supported on 295 steel columns. Total joists that make up the staging of this huge tank can measure up to 80 km in length. It is supplied by a single 1.50 m diameter mild steel water main and has four separate compartments with isolation facility.

In 1901, Arthur Peirce, AMICE (Assistant Engineer to Calcutta Corporation), is believed to have first conceived this magnificent structure to ensure round the clock water supply. The idea was to provide an elevated balancing reservoir with only a single supply cum delivery line which would receive water by pumping during off-peak hours, store it, and then supply during maximum downstream demand. This concept was quite innovative and met with the approval of the Chief Engineer, W B MacCabe, MICE. The foundation of this huge structure was prepared by M/s T K Mukherjee and Co., supporting this immense weight of water (41,000 ton) and the tank’s steel components (8,500 ton) was a challenging project. Sir R N Mukherjee’s company M/s Martin and Co. laid the concrete foundation for this structure and M/s Clayton, Son and Co. was responsible for providing, fabricating, and erecting the steel members and tank. These were fabricated and brought from Middlesbrough, UK. Cover for this tank was provided by Arracon Co. and Babu Kali Shankar Mitter. The tank was installed in just two years and was commissioned in May 1911.
In 1978-79, the Calcutta Metropolitan Development Authority undertook extensive repair works. However, lately, this magnificent structure showed signs of deterioration with regard to: a leaking reservoir bottom, corroded and failing roof elements, rusted members and supports inside compartments, displaced supports, corrosion in support members (beams and columns), water accumulation at the base weakening the foundation, damaged access platforms, and a lack of overall maintenance of the structure and its surroundings, etc.

The Kolkata Municipal Corporation has now taken up a project to rehabilitate this century-old structure to return it to its original glory at a project cost of almost £1 million. Under this project, several steps are now being adopted to make this structure sustainable for decades to come. Of late, a field trip was organised by the ICE Kolkata chapter to recognise the relevance of Tallah tank in the overall water supply system of Kolkata (in service since 1868) and appreciate the technicalities and challenges involved in its rehabilitation and retrofitting. The rehabilitation works are being supervised by the Construction Engineering Department of Jadavpur University (Kolkata) as consultants to the Water Supply Department of the Kolkata Municipal Corporation and contractor for the works is M/s Bridge and Roof Company Ltd (a Government of India undertaking Company).

Tallah elevated water tank remains a civil engineering marvel with unique features hardly found in any similar structure across the globe.


Kronstadt Bridge
By David Greenfield

My article ‘Recent Research on Brunel’s Swivel Bridge’, in PHEW Newsletter 149 (March 2016), highlighted the ‘Brunel’s Other Bridge’ (‘BOB’) project, which aims to restore to working-order his 1849 wrought-iron plate-girder swing bridge at Cumberland Basin in Bristol; see http://www.brunelsotherbridge.org.uk/. This innovative bridge’s most distinctive features are the balloon-shaped tubular top flanges and triangular tubular bottom flanges of the main girders.

Brunel subsequently designed heavy-duty variants for railway use and, after his death, at least two smaller replicas of the Swivel Bridge were installed at Cumberland Basin. The article also mentioned the discovery of on-line images of ‘Dock Bridge’, a plate-girder swing bridge that has top and bottom flanges almost identical to those of the Swivel Bridge, but to a larger scale. It is located in the city of Kronstadt on Kotlin island, near St Petersburg. Against all expectations, an emailed enquiry to the Kronstadt Tourist Information Office in October 2018 produced a response from historian Eugene Kobchikov, who is researching the history of the bridges in the city for the Kronstadt Museum. The following synopsis of our ensuing collaborative research findings is compiled from contributions by Eugene and my co-researchers in ‘BOB’-related matters - Graham Laucht, John Ditchfield and Geoff Wallis.

The Russian military engineer Captain (later Major-General) Nikolai Bogdanovsky (1818-1887) supervised construction of Dock bridge in 1856, and has been generally credited with its design. However, having now seen the remarkable similarities between Dock Bridge and Brunel’s Swivel Bridge, Eugene postulated that the renowned Russian Engineer Major-General Stanislav Kerbedz (1810-1899) could have met Brunel while Kerbedz was travelling abroad in 1852/3 to familiarise himself with new railway and bridge construction technology. This has been confirmed and we have found evidence in Brunel’s office diary that the two of them met at his Duke Street office on 25 June 1852. The topics they discussed are not stated, but at that time Brunel had recently completed a large ‘balloon-topper’ swing bridge over the Severn for the Gloucester & Forest of Dean Railway, and was actively seeking tenders for another on the G&FDR dock branch at Gloucester.

In addition to the top and bottom flanges, there are significant similarities in the turning mechanisms of Dock Bridge and the Swivel Bridge. So, it is conceivable that Kerbedz left Duke Street in June 1852 with a bundle of relevant sketches and drawings after having heard Brunel’s convincing ‘pitch’ for the balloon-topper genre. He may also have seen the Swivel Bridge itself, and the G&FDR swing bridge under construction.

The original intention was to fabricate Dock Bridge in England and ship it to site, but the Crimean War intervened. So, in 1854 the Construction Department of the Russian Maritime Ministry contracted with Baird’s ironworks in St Petersburg to fabricate and
install the bridge, under Bogdanovsky’s supervision. Eugene has discovered that Bogdanovsky reported he had received working drawings for the bridge from Kerbedz. All this new evidence points to Kerbedz having advocated the balloon-topper principle for Dock Bridge, and that he was probably responsible for its design. Our research continues while Dock Bridge, like the Swivel Bridge, is being restored.

William Menelaus plaque
By Stephen K Jones
On Friday 21 December 2018 the South Wales Institute of Engineers Educational Trust (SWIEET 2007), in association with ICE Wales Cymru, presented a framed panel on the life and works of the engineer and ironmaster William Menelaus (1818-1882) at the Red Lion, Penderyn, Aberdare.

Scottish PHEW visit to East Sutherland 4-7 July
By Sandra Purves
This year’s visit includes 3 nights’ accommodation in Dornoch. Travel will be by coach and train. 3 days’ Dinner Bed & Breakfast plus travel costs will be approximately £400 per person.

ICE members and members of the public wishing to join for one day only will be most welcome.

Highlights include:

- The most northerly of the major Scottish hydro-electric schemes
- The two most northern freight-carrying canals in the UK
- The location of the most northerly coalmine in the UK
- The site of the tramway that carried coal from the mine to the harbour and railway station,
The final quarter of ICE200 brought the Institution’s bicentenary year celebrations to a splendid conclusion. “Shaping the World: Two Hundred Years of the Institution of Civil Engineers”, the commemorative volume of 200 iconic projects was published to great acclaim, including a very favourable review by Matthew Parris in the Times. It’s not often that what is essentially a self-congratulatory publication, celebrating ICE members’ influence on the world, reaches such critical acclaim so it’s a huge credit to all our contributors, and to Carol Morgan and others in the ICE who worked very hard to source writers and suitable images. The final read through for accuracy by our PHEW committee became quite a Herculean task and resulted, at least in some cases, in quite significant intervention for consistency, but I hope my fellow members agree that the effort was worthwhile and raised the quality of the final book considerably. The PHEW and Archives input, from selection of the projects through to final edit, was greatly appreciated by ICE President Lord Robert Mair and others.

PHEW now has three new projects under way. The first is to build on the ICE200 projects and use those to build the quality of the online information on each, including enhancing our HEW data sheets and supporting references. The second is to digitise our past newsletters to turn them into a useful, searchable resource available to all. The third is making heritage trail information accessible to all and providing best practice production guidance.

The plan is to use these three to build enthusiasm for more tasked projects, working closely with the growing capability in exhibitions and outreach in One Great George Street.

ICE200 has unlocked new interest in engineering heritage across the membership and we want to tap into that to build the community of interest in sharing our knowledge more widely, not least as a learning legacy for practitioners on active engineering projects. This was the theme for our session within the Global Engineering Congress in October, “Turning Hindsight into Foresight” at which we welcomed Ted Green, chair of the ASCE History and Heritage Committee, Mike Bartlett, Chair of the Canadian Society of Civil Engineers National History Committee, and Andy Savage, Chief Executive of the Railway Heritage Trust to stimulate a discussion on how experiences in the design and delivery of projects and works can be captured as learning legacies, and how an understanding of the past life of the works and its alterations through the years, is essential for effective conservation and perhaps repurposing. The session went extremely well and our colleagues from USA and Canada introduced a global perspective that added greatly to the session.

That day of the conference was rounded off with a reception in the Great Hall to witness the unveiling of the latest ASCE International Historic Civil Engineering Landmark plaque, now fixed in the entrance hall of the Institution. The wording, always carefully chosen by ASCE in consultation with ICE and CSCE, states:

“The World’s First Professional Engineering Society began on 2 January 1818 at Kendal Coffee House, Fleet Street, London, with eight young engineers keen to share information and instruction. They adopted the name “Institution of Civil Engineers” on 13 January 1818. The eminent civil engineer Thomas Telford served as president from 1820 until his death in 1834, and donated a book collection to found its library. As Telford encouraged study and sharing of knowledge, membership grew, and the Institution received a royal charter in 1828. Through its members and staff, the Institution has provided global leadership in engineering excellence for 200 years (1818-2018).”

With our visitors from the US, the party including Jerry Rogers and Bill and Kathlie Bulloch, Dave Gilbert and me, headed north on the Saturday morning to meet up with the Friends of Union Chain Bridge, essentially to reconnoitre the planned installation of another IHCEL plaque to mark the bridge’s bicentenary year in 2020. You can read about that visit elsewhere in this issue.

Chairman’s Column
By Gordon Masterton

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I must also tell you about one of my accidental publication career highlights through a request from the ICE’s press office. The result was that in December the Italian edition of GQ (yes, the glossy gentlemen’s lifestyle magazine) published a ten-page spread, stylishly illustrated (of course), with a piece telling the story of our ICE200 publication, Shaping the World, translated into immaculate (I’m told) Italian. PHEW has reached new heights of awareness within the readership of lifestyle magazines!

Hews in the News

On 5 December 2018 the £75m restoration of the Tay Rail Bridge won the top prize at the National Railway Heritage Awards for the best overall entry following the completion of its refurbishment in autumn 2017. The prize went to Network Rail and main contractor Taziker Industrial (TI) who carried out the extensive programme of strengthening, repair and repainting work. The work involved encapsulation of multiple spans with scaffolding to grit blast, repair defects where exposed and repaint with a four-coat system as used on the Forth Bridge. It remains the longest rail viaduct in Britain. (HEW No.0199)

Local repairs and repainting of the approach spans began in 1996, while strengthening repairs were between 2000 and 2004. In 2003, the £20.85million strengthening and refurbishment project on the bridge won the British Construction Civil Engineering Award, where more than 1,000 tonnes of bird droppings were scraped off the iron latticework of the bridge using hand tools. Also, hundreds of thousands of rivets were removed and replaced, all done in very exposed conditions while high over the Tay with fast-running tides. [https://www.networkrail.co.uk/tay-bridge-wins-top-prize-at-railway-heritage-awards/](https://www.networkrail.co.uk/tay-bridge-wins-top-prize-at-railway-heritage-awards/)

A £2 million project to transform the Leeds & Liverpool Canal towpath between Skipton and Gargrave, and Bradley to Kildwick, has been given the go-ahead. The Canal & River Trust has been awarded £1.46m from the Rural Development Programme for England (RDPE) to improve 11km of towpath, Craven District Council and CRT have provided further funds. The project is part of a long-term Access Development Plan commissioned by Craven District Council and written by Sustrans. The plan identifies a phased approach to improving accessibility along the Leeds & Liverpool Canal; providing a safer walking and cycling access into the Yorkshire Dales and making connections into neighbouring towns and villages. Work is due to commence in 2019. [https://www.cravendc.gov.uk/news/news-archive-folder/january-2019/2m-project-to-improve-craven-canal-towpath-gets-green-light/](https://www.cravendc.gov.uk/news/news-archive-folder/january-2019/2m-project-to-improve-craven-canal-towpath-gets-green-light/)

Menai Suspension Bridge appeared on BBC Wales regional news programme on 2 January 2019 - Wales Today. Bob Daimond highlighted the start of work on the bridge towers two hundred years ago this year. Telford was authorised to begin work on the Suspension Bridge in 1819. According to the Edinburgh Evening News, 12 January, Scottish Canals have received increased funding allowing repairs to be carried out on the Caledonian and Union canals. Work will include replacing lock gates at Kytra and Fort Augustus.


Readers of this newsletter are asked, whenever they read of something which they think might deserve mention here, to send it, or a copy to Carol Morgan, contact details below

Editor’s Note

By Dermot O’Dwyer

May I repeat the regular appeal for Newsletter contributions which may include diagrams, photographs and / or illustrations. Those which are both informative and appeal for further information, or publicise forthcoming conferences or the availability of recent books, etc., are particularly welcome.

Contributions should be sent to the ICE as soon as possible after receipt of this newsletter by post to:

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