

Panel for Historical Engineering Works Newsletter

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Jack Knight

by Paul Dunkerley

The Panel was saddened to learn of the sudden death, on Monday 21 May 2007, of Jack Knight. His association with the Panel resulted from an email from Jack to the ICE North West Administrator during late 2003 offering to give a lecture on Victorian Railway Tunnels. It was passed to the two Development Officers, resulting in an invitation to Jack to become Convenor of a new PHEW Tunnels Sub-Panel in January 2004, from one and an invitation give a talk in Preston in April 2004 from the other. Word of Jack's excellent talk soon spread throughout the North West, and he found himself in great demand due to his knowledge of, and great enthusiasm for, his subject.

Jack was a warm and friendly person who will be missed by those who were lucky enough to know him, however briefly.

Retirement of Dr Jim Shipway

by Roland Paxton

My friend of many years and co-author of *Civil Engineering Heritage: Scotland* has retired from the Panel following a health downturn early this year. He had served the ICE Glasgow & West of Scotland Region for 9 years – a post now filled by Sandra Purves with his support.

Jim's interest in civil engineering history goes back at least 40 years. In 1987 his authoritative monograph on the Tay Bridge was published.

Jim has also written on other subjects including the West Highland Railway Extension and Glasgow Underground, for which his great grandfather was the consulting engineer. He has always taken an interest in the work of Sir William Arrol and Company by whom he was employed

early in his career. In 2003 readers may recall our congratulations to him on his PhD for a thesis on the development of the girder bridge.

I have particularly enjoyed knowing and working with Jim. His wholehearted and significant contribution to engineering history and PHEW is widely appreciated. The Panel wishes him all the very best in his retirement as an octogenarian and hopes that for many years he will enjoy tuning in to the digital radio presented to him as a token of our appreciation.

ICE Annual Award for Roger Cragg



Roger Cragg

Roger Cragg was honoured to be informed in June by the Acting Director General of the Institution that he had been jointly awarded the 2002 Certificate for Contribution to Institution Activities, an award first made in 1995.

Roger has been Area Panel member for the Midlands area of the Panel for Historical Engineering Works since 1977 when he took over from his predecessor, Peter Baldwin and during the last 25 years Roger has made many contributions to the work of the Panel. The number of recorded HEWs in the Midlands area has increased from about 30 in 1977 to today's total of 225. Although Roger has produced most of these Records he is appreciative of the assistance of many 'helpers' over the years; in particular the contributions of Tony Daniell in Shropshire and Philip Shaw in Hereford and Worcester are gratefully acknowledged.

In February 1975 the Panel started the production of a 'News Bulletin' which appeared at irregular intervals until June 1978 when it was replaced by the present Newsletter with Roger as its first Editor, a job which he continued to do until 1984.

Having contributed to the production of the *Civil Engineering Heritage* books for Eastern England and Wales and Western England, Roger took on the task of editing the second edition of the latter book, now more accurately entitled *Wales and West Central England*, which was published in 1997.

The subject of the assessment of historical value of HEW's is one which has engaged the attention of the Panel from its earliest days. In March 1993 the Panel set up a Working Party under Roger's chairmanship to look afresh at this subject. From the discussions of the Working Party emerged the Panel's present policy on assessment which included the creation of Sub-Panels to tackle the job of developing databases of information and assessment methods for particular types of structures. In 1998 the Panel agreed to the formation of an additional Sub-Panel for Inland Waterways under Roger's leadership.

As the local Panel Member, Roger has been an ex-officio member of the ICE Midlands Committee for many years and was surprised and delighted to receive a mention in the Chairman's address at the recent Annual Dinner.

Thomas Telford 250th Birthday Celebrations in Scotland

by Roland Paxton

Paisley Canal Station Plaque Four Scottish PHEW – initiated events began on 29 June with a joint ICE / First ScotRail / Network Rail plaquing at Paisley Canal Station. Hugh Henry MSP did the unveiling on behalf of Douglas Alexander MP, then Secretary of State for Transport and for Scotland who was unable to be present.



Blackhall Aqueduct Paisley © R Paxton

The plaque informs that the Paisley Canal engineered by Telford, including nearby Blackhall Bridge (1809) which carried it over the White Cart on the longest masonry aqueduct span of the 'canal age' (27m), was converted to railway use in 1883 and today, after nearly 200 years, now serves as the Paisley Canal line from Glasgow Central.

Steve Montgomery, First ScotRail's Deputy Managing Director, Ron McAulay, Network Rail's Director Scotland and transport historians Dr Ann Glen and Stuart Rankin were among those present. Afterwards there were commendatory speeches and a lunch reception in 'Platform One', at the original station.



Paisley Canal Station – Hugh Henry MSP unveiling Telford plaque © First ScotRail

A Telford International Conference was held by the Royal Society of Edinburgh on 2 July, attendance 180, for which on behalf of PHEW and the Society I directed the technical programme of 12 papers by key speakers from as far as Sweden, Canada, the USA and Japan, with emphasis on research and present-day relevance. Claes-Göran Osterlund cut a dash in the blue and gold uniform of Count von Platen! Copies of the papers ISBN 978 0 902198 40 1 are obtainable from the RSE or myself.



Professors Muscatelli and Paxton, Sir Michael Atiyah, The Duke of Edinburgh, Dr Harris, and Professor Leiper at Edinburgh's Telford College © Gary Doak, courtesy RSE

Afterwards, a plaque in Telford's honour was presented to Edinburgh's Telford College by Heriot-Watt University, the ICE and RSE.

It was unveiled by the Duke of Edinburgh who took a keen interest in its wording and the hand struck proof marks on the Menai Bridge link edge recording its having taken a 35-ton strain. This and the Paisley plaque were made by Alexander Pollock Precision Engravers, Haddington.



The Duke of Edinburgh leaving the Menai Bridge link display © Gary Doak, courtesy RSE



6mm dia, proof marks © R Paxton

PHEW Scotland's Telford Tour, organised by Sandra Purves and myself, began with coffee on a visit to the 33m tall Glencorse earth dam and reservoir (1823) near Edinburgh. It was introduced by ICE Vice-president Professor Paul Jowitt and well hosted by the staff and consultants of Scottish Water, who outlined company activity and produced a *History of Edinburgh's Water supply* for the occasion.

A key element of the tour was to award ICE / ASCE international historic civil engineering landmark status, recorded by plaques, to two iconic Telford projects, Craigellachie Bridge and the Caledonian Canal. Approaching owners, case preparation and plaque wording involved much effort, which proved successful, thanks to the enthusiasm and support of the owners, ASCE and ICE. The owners felt that the awards would enhance the status of their charges and maintenance funding. The plaques were made in the USA.

The tour participants included ICE President Quentin Leiper and family, Allen Beene, ASCE President's representative, Gordon Masterton PPICE, Brian Crossley chairman PHEW, Henry Petroski chair ASCE History and Heritage Committee, Dr Jerry Rogers former VPASCE and other engineers and supporters from the UK, Ireland, Denmark, Holland, Sweden, Canada, the USA, and the Newcomen Society.

North to Elgin On 3 July the party of 75 set off in two coaches via the Forth and Tay bridges for Dundee where at the 'Discovery Centre' they were warmly welcomed by ICE Dundee Branch members, chairman Alistair MacKenzie, secretary Walter Scott and the city's Lord Provost John Letford over coffee. Afterwards we viewed the polar ship 'Discovery' in its dock within Telford's former ferry harbour and, from a distance, the solitary pier light, all that now remain of his extensive harbour works.



Aberdeen Harbour North Pier – Telford's inclined courses
© FM Jones

After an enjoyable but all too brief visit to this thriving harbour we then travelled via Telford's Bridge of Don to Elgin where we were given a civic reception by The Moray Council. A memorable civic dinner afterwards was hosted by Convener George McIntyre who in a speech expressed his appreciation of the key role in society of the civil engineer. Quentin Leiper replied appropriately concluding with a toast to Telford. I shed some new light on the erection of Craigellachie Bridge, naming Telford's inspector as local farmer John McInnes, and also on Telford's poetry! Henry Petroski followed with an American perspective on Telford's work and influence.

4th July celebrations Still as guests of The Moray Council, after visits to Macallan or Glen Grant distilleries and Speyside Cooperage, we were entertained to a memorable lunch in a marquee adjoining Craigellachie Bridge to lively tunes from the fresh-faced Fochabers Fiddlers and short speeches from Telford and Southey actors in period costume, Convener McIntyre, myself and Bill Lowson, who had directed the tasteful refurbishment of the bridge in 1963–1964. We then followed a piper to the bridge for the unveiling of the plaque by Allen Beene and Quentin Leiper, before a large congregation including schoolchildren and nationally via the Scottish media. A big thank you to Moray Council and its staff, particularly Neil Fotheringham, Reni Millburn, and John Stewart for the excellence of the arrangements. (The unveiling was also reported in *The Times*, 4 July. Ed.)



Maritime Museum, Aberdeen – Jamie Christie pointing out the new North Pier display © Aberdeen Harbour Board

Then on to Aberdeen as guests of the Aberdeen Harbour Board and Aberdeen Association of Civil Engineers, president Jamie Christie, secretary Andy Martin, over lunch at the Aberdeen Maritime Museum, director John Edwards, who had generously found Telford exhibition space among other fascinating exhibits. After speeches and presentations we inspected the internationally known North Pier which from 1769 had exercised the talents of Smeaton before those of Telford, Gibb and Cay.



Craigellachie unveiling – Provost McIntyre, Professor Leiper, Allen Beene © Moray Council

Then, en route for Drumnadrochit, we briefly inspected the harbour and granaries at Burghead (Telford 1812) now a well-used leisure facility. In the evening we boarded the 'Jacobite Queen' on the Caledonian Canal at Tomnahurich as guests of British Waterways for a cruise. We were welcomed by British Waterways chairman Tony Hales with Steve Dunlop and Jim Stirling and enjoyed a convivial supper as we passed through Dolgarroch Lock via Loch Dochfour into Loch Ness where the Caledonian Canal plaque was presented by Allen Beene and Quentin Stevenson in a truly magnificent setting.



Craigellachie Bridge and piper © Mark Watson



Telford tour party at Drumnadrochit hotel with their aptly named coach © FM Jones

North to Sutherland Next day our first visit was to Fortrose Harbour (Telford 1817) still virtually in its original state, with local engineer Lucy McLennan as guide. Also to a well-planned Telford exhibition nearby mounted by Liz Darby. We lunched at Dornoch in Sutherland, attractions being the cathedral and the History Links Museum, where an early Fleet Mound flap-gate winch was on display.

Then onwards to the 1,000 yard Fleet Mound on Telford's Edinburgh-Thurso Road with its tidal flap-gates for land reclamation (Telford 1817). We returned south via Bonar Bridge where, after inspecting the commemorative plaques for the 1812 (Telford), 1893 and 1991 bridges, we continued via the Struie Road (Telford 1817) with its Alness and Easterfean stone bridge masterpieces.



Forth Augustus Locks plinth site © FM Jones

At Fort Augustus Locks the Caledonian Canal plaque presented on Loch Ness the previous evening was, thanks to the efficiency of British Waterways engineer Andrew Ross, now adorning its fine, St Bees red sandstone ashlar plinth. After its unveiling we adjourned for supper at the Lovat Arms.



Caledonian Canal Plaque © FM Jones

Back to Edinburgh Next day by popular request we stopped at Bridge of Oich, Aberchalder.



Moy cast-iron turn-bridge, 1820 © FM Jones

At Banavie we visited the famous 'Neptune's Staircase' (Jessop and Telford 1811), followed by lunch at 'The Moorings' as the guests of Royal Haskoning and the ICE Highlands & Islands Branch, Chairman Bob Bryce, Secretary Derek Donald. After speeches, on to Edinburgh via Glen Coe and Dunkeld Bridge (Telford 1809).



Professor Leiper presenting a perspex Telford effigy to Roland Paxton at Banavie © FM Jones

Cairn unveiling at Glendinning 9 August An outstanding event, all the more enjoyable for Sandra Purves and myself as we had not had to organise it, was performed with style by Gordon Masterton PPICE at Telford's remote birthplace, Glendinning Sheep Farm, on the actual 250th anniversary of Telford's birth.

The landowner, Lorraine Luescher, who employs traditional farming methods using two shepherds, had initiated the project for making Telford's birthplace publicly available and designed the cairn, built by drystone dyker Eric Boyes (with tablet sculpted by Peter Rae, Annan), and donated the land. Also the land for the visitors' car park, in the provision of which and in local authority matters David Yarrow of BEAR had helped significantly.



Telford cairn unveiled at Glendinning by PPICE Gordon Masterton. Lorraine Luescher (left) Margaret Sanderson (right) © R Paxton

At a second ceremony Gordon Pomphrey, chairman—elect of ICE Glasgow and West of Scotland Region, unveiled a plaque commemorating Telford prepared by David Russell, its archives committee chairman, at the car park.

This wonderfully evocative and appropriate event was organised by the people of Langholm and Westerkirk led by Margaret Sanderson. After a memorable lunch in the Buccleugh Centre, Langholm, Lorraine Luescher spoke on Telford and everyone was given a copy of her readable and well-produced 16-page 'Eskdale Tribute' to Telford. Former Panel Member Ken McCrae, now a dapper nonagenarian, cut the cake, inscribed in icing, 'THOMAS TELFORD', '1757' and '2007' (within twin stone arches) and '250 YEARS', and proposed the Telford toast, which was received with acclamation.



Ken McCrae cutting Telford 250th birthday cake on 9th August © Roland Paxton

Euston Redevelopment

by R J M Carr

The current 1960s Euston railway station in London is to be demolished and replaced by a new building. Office development is to be permitted so we should expect some tower blocks and a bridge will be built across the concourse to increase the area available for retail outlets. Housing, presumably flats, is also included in the plan. The present congestion will be eased by increasing the number of platforms from 18 to 21.

Development over the rail tracks may well mean that the platforms, presently lit by some daylight will become submerged as on the east side of Liverpool Street station. It is not known if any portion of the Euston Arch of 1838 might be incorporated into the new scheme but anyway this is a great opportunity to build a really splendid new station. Redevelopment at other London railway termini is also planned.



Euston railway station © R J M Carr

New Heritage Leaflet – Cumbria

Historical researchers Paul and Anna Dunkerley have just published the second leaflet in their series celebrating the inventiveness and creativity of engineers in the North West of England. Sponsorship has been provided by Keller and ICE Northwest.

The leaflet entitled *Cumbria 'Firsts' "The spirit of innovation"* is now available from nearly two dozen Tourist Information Centres throughout the county of Cumbria.

International and national records in construction and allied fields of endeavour in or associated with Cumbria are described briefly, from the first recognisable 'industry' in Britain dating from 3000BC to the award winning 2006 renovation of a record breaking Victorian iron viaduct across an estuary in Morecambe Bay.

Other works described in the leaflet vary from mining to water supply, a cotton mill to a railway station, bridges, viaducts, harbours, lighthouses, foundations, and the world's first commercial nuclear power station.

Further information from Paul Dunkerley, HeritagePD@aol.com; 01772 671224.