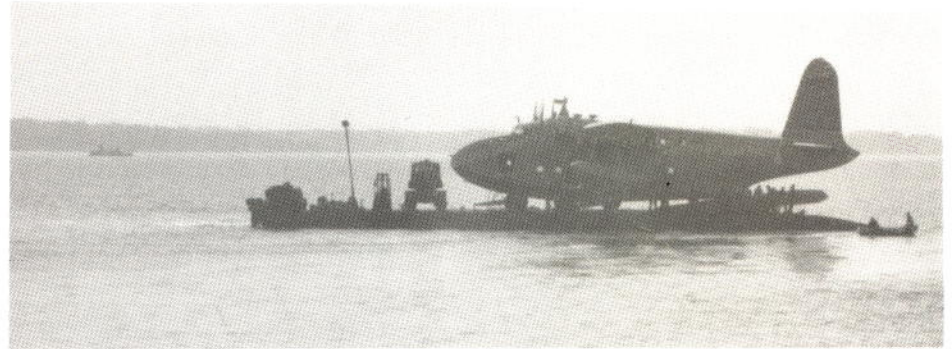


New Home for Science Museum's Flying Boat.

A rare Short Sandringham flying boat built on the Medway at Rochester and used latterly in the West Indies will find a final resting place in a new aircraft museum being built in Southampton. *Southern Cross* was purchased and repatriated in November 1981 by the Science Museum with the help of the National Heritage Memorial Fund. There are few sites now capable of offering waterside hangarage for a flying boat of this size (the Sandringham is the civilian equivalent and a close derivative of the four-engined Short Sunderland beloved of RAF Coastal Command) but after a short spell at Calshot following its arrival in British waters, the *Southern Cross* was moved to Lee on Solent where it could be housed under cover. Local volunteers worked on it there for much of last winter. Southampton Corporation now proposes to spend nearly £1½ million on a new building to replace the R J Mitchell Museum where the Supermarine S6 A and Spitfire, both designed by Mitchell, have been housed in temporary premises now closed to the public.

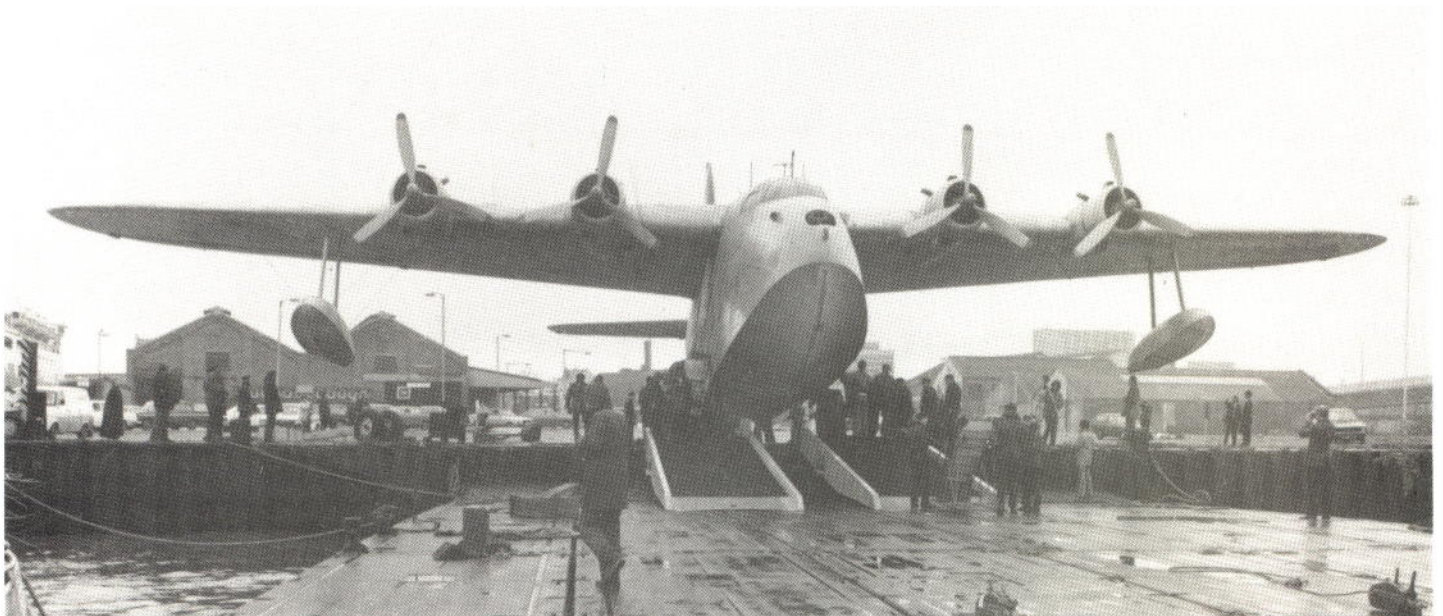
The new building will be near the new Itchen Bridge, and plans have been prepared by the City Architect. It is hoped to build it large enough to accommodate other aircraft in future as they become available.

Although the new museum, in Albert Road South, is still being built, the Sandringham has to be moved in at an early stage because of its



great size and weight; its wing spans 113 ft and it weighs 19 tons so the aircraft is to be installed before the building is roofed. For the journey from Lee on Solent to Southampton Docks on 1-2 March this year, the flying boat was loaded onto one of the Royal Corps of Transport's Mexeflotes, a self-propelled barge normally used for ferrying stores ashore from supply ships. Similar units were used during the Falklands campaign last year. At 120 ft long, the barge was just large enough to contain the aircraft's 113 ft wing span. Since the move the aircraft has been dismantled for inspection and restoration work. It is hoped to re-assemble it in the new building during the autumn, ready for an opening at Easter 1984.

Threatened Sites: a Report. One of the ways in which the AIA endeavours to encourage conservation, and to represent the interests of IA at national level, is to maintain a watch on planning applications for alteration or demolition of listed buildings. Such a task is most appropriate at local level, where the juxtaposition of information and public interest provides the clearest picture, but it seems appropriate to attempt to swap experience between local areas, and to develop some ideas of valuation according to national standards. So Council collates information from various sources, and is particularly grateful to those members of AIA and of affiliated societies who keep it informed of threats to our industrial heritage in different



parts of the country. During the year over forty different sites have been discussed at Council meetings, and the following is a very brief selection. Not all, of course, demand objections — some make good news, where encouragement rather than protest is the order of the day.

In many ways it seems to have been the year of the docks, especially with progress at last on the rehabilitation of the Albert Dock, called by Pevsner the finest nineteenth century commercial buildings in Europe. The strong commitment to renewal of historic dock buildings does not yet seem to extend to London where the two remaining Gwilt warehouses still have no guaranteed future, and where the granite road setts are not safe even in a designated conservation area. However, there are hopeful signs that the several renovation schemes on the south bank of the Thames adjacent to Tower Bridge will respect the historic character of the wharves there. Meanwhile, there are schemes afoot for a Scottish maritime museum based on the harbour at Irvine, and recent events will surely lead to a spate of developments at Chatham.

Away from the coasts, maltings seem to be attracting considerable attention, with threats of demolition at Sleaford and Cirencester which have both been met with arguments for re-use of buildings which form important landscape elements. It is encouraging to see that North Kesteven District Council has steadfastly resisted the pressure to demolish the Bass Maltings at Sleaford, and has recently commissioned a major study of potential new uses. The leisure industry continues to produce new uses for such industrial buildings as canal warehouses at Blackburn and Wigan, and the Reckitt's 'Dolly Blue' works at Backbarrow, Cumbria; but new uses for abandoned railway viaducts are more difficult to come by, and the case of Bennerley Viaduct drags on with diminishing hope.

Two sites which have caused particular concern have been the Dee Mill engine, where the recent demolition of the mill has left the engine house an easy prey to vandalism while the new owners seek an unrealistic price for sale to a preservation agency; and the 'odd-work' shop at Lench's, Old Hill, West Midlands, where sale of the site has made removal to the Black Country Museum the only remaining option for this very important survivor of the once numerous hand-workshops.

Another case pursued with vigour concerned the six remaining 'Concrete houses' of the Hodbarrow Mining Company at Millom, Cumbria; the AIA objected at first to the demolition proposals, but when it became apparent that the constructional interest was considerably less than had been supposed, and that the economics of repair were unrealistic and inappropriate, the objection was withdrawn on condition that the developers funded a detailed record of the buildings. The outcome of the Public Inquiry is awaited.

Fakenham Gas Works has long been a candidate for preservation, but the decision of the DoE in 1981 not to take the site into guardianship has caused considerable concern. Now the Norfolk Buildings Trust is showing great interest, and it is hoped that a solution will be announced shortly. Meanwhile a rare survivor of a Siemens glass furnace has been identified at St Helens, Merseyside (does anyone know of any other Siemens furnaces?), and with the support of the Ancient Monuments Inspectorate for scheduling, the local authority has bought the site and building in order to preserve it.

If your area is not represented amongst the above, it may be the fault of the selection; or it may be that Council didn't hear of threats which undoubtedly arise every day: If you do hear of threats to listed buildings, by neglect as well as by development proposals, please let Council know as quickly as possible. Please send details to the AIA Sites Officer, giving details of the site and the development proposals, a copy of the planning proposal if there is one, a photograph if possible, and the closing date and destination for letters of objection, as appropriate.

*John Crompton,
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Birkenhead
Merseyside
L43 4UG.*

The Albert Dock Revisited. It is almost two years since the then Secretary of State for the Environment, Michael Heseltine, pronounced his verdict on the Albert Dock, and more than two years since details of the Public Inquiry into the dock's future were reported in the **AIA Bulletin (Volume 8, No 2)**. Since then the fortunes of the site have changed very radically; and if a lot of mud has flowed into the River Mersey during the interval, it has certainly **not** ended up in Albert.

After the Inquiry itself came the usual period of bitten fingernails as Merseyside waited for the Secretary of State's decision. It was not entirely a period of inactivity; for during the spring a new force arrived at its offices in the Royal Liver Building — the **Merseyside Development Corporation**, central government's latest answer to the planning problems of Britain's largest derelict areas. The arrival was received with some suspicion, as yet another planning authority in an area where planners didn't seem to do much good; and at first the potential of docklands redevelopment seemed out of tune in a city gathering itself for a summer of riot and arson. The Secretary of State's decision almost coincided with Toxteth, and a refusal to allow Gerald Zisman Associates to proceed with the infilling and development of the dock may have seemed in some quarters to be another denial of urban aid to Merseyside. To the conservation lobby, Albert was 'saved'

again, and as on several previous occasions it slipped quietly away from public consciousness, to languish, decline, and decay.

But not so! Such a view doesn't allow for the presence of the Development Corporation, sorting out its staff and its telephones, and very quickly getting down to strategic plans and to negotiations with the Dock Company. Despite the relatively small area, compared with the London Docks, there was enough to do in getting the 1984 European Garden Festival scheme going; and Mr Zisman was left in peace to seek support for his scheme — until, that is, the expiry of his planning option at the end of 1981. At that stage the Development Corporation became the planning agency; and from May it also became the owner of Albert Dock. What is more, it was already apparent that the conservation of the historic landscape was seen as an essential element — indeed, as the cornerstone — of the regeneration of the derelict docklands.

One of the features of the Public Inquiry was the amount of guesswork and fantasy which was presented as evidence. In fact there had never been any concerted effort to assess the condition of the dock and its buildings; and so a programme of very detailed structural appraisal was the first stage of the new activity. Holes were knocked in walls and ceilings to ascertain the condition of the buried ironwork; samples of stone and brick were extracted for crushing tests; a detailed survey of cracks and movements was made; sections of the iron roof were subjected to load-tests; and at last there were deep excavations to reveal the condition of the famous timber piles which provide the foundations for the western half of the site. The reports were all very good — the building is in excellent condition and no major works are required. Unfortunately the same couldn't be said for some sections of dock wall **outside** Albert itself, and for the timber piles under the Dock Traffic Office; and these items are demanding major civil engineering work to prevent total collapse.

So much for the investigative stage, which was absolutely fascinating because it revealed structural details which haven't been seen since the building of the complex back in the 1840s. Now the work itself is in full swing, and it is fascinating again to observe both the evolution of the plans, with their compromise of con-



servation and commercial interests, and also the engineering methods being used to effect the regeneration. With the appearance of the structural reports came the arrival of a dredger. If there had been one nasty flaw in Albert's image, it was the silt at low tide — so the obvious treatment was to get rid of it! The dredger, a sort of floating vacuum cleaner with rotating cutters at the end of a long suction boom, removed some three quarters of a million tons from Albert, Canning, and Salthouse docks in about twelve weeks. More recently, work has begun on preparations for the new lock gates which will allow ships, notably the Tall Ships race in August 1984, to enter the south docks system once again. Purists will not see these gates as an ideal solution. They are to be single flap, hinged at the bottom, in order to allow a flexible water regime without the excessive costs of pumping and dredging. The housings for the gates are begun, and though the form of dock walls will have to be changed to accommodate them, the original outlines will still be obvious.

Another early starter has been the provision of mains services: water, sewerage, and electricity. After very detailed mapping of the quaysides and service roads, all surface materials and artefacts have been lifted and taken to store, the ironwork for cleaning and restoration, and the setts and kerbstones for replacement once the services are complete. Again, the pattern will not be exactly as it was, though almost all the quay furniture will be accurately located, and new items such as lamp-posts and safety chains will be exact copies of existing items, even down to the twist-link chains. Local amenity societies have expressed reservations about the very small amount of tree-planting which has been planned close to the warehouses — Albert was never likely to have been sylvan — and consultation is still in order on such matters despite the rapid march of events.

Then of course there is the work on Hartley's massive warehouses themselves. The great urgency has always been to allow the Merseyside Maritime Museum to expand across the Canning Half-tide Dock into the north stack, Block D. No surprise, then, that this was the first building to undergo structural

appraisal, and that it is now the first building to enjoy the attentions of the engineers and builders. Scaffolding began to appear in mid-May, to allow blast-cleaning of the building inside and out. Cracks and voids are being filled with epoxy resin, injected under vacuum with the dual aim of consolidating the structure, and protecting the buried ironwork from water percolation and corrosion. Soon the 'pagoda' roof section (a later addition) will be demolished, to be replaced by a steel roof of exact internal profile, though not to Hartley's original design. Window frames have been removed, to be replaced by exact replicas cast in aluminium. Parts of the mezzanine floor (a Hartley feature, allowed for in the original design and fitted to most areas soon after the completion of the warehouses) have been removed to allow greater headroom and more flexible display space. Changes . . . and compromise again!

In my last report on Albert I suggested that in Britain we have no experience in the rehabilitation of large industrial buildings, and that there are crucial lessons to be learned. Some of those lessons may turn out to be painful, as the commercial realities of rehabilitation become ever more overwhelming. To pontificate about the 'integrity' of historic buildings in the context of new uses is to see buildings falling down through lack of progress. One cannot argue with the notion that, however much the architecture is restored to what it once was, Albert can never again be a working docks. It will either be a working something else, or it will fall down! So a compromise has to be sought between the commercial demands of new uses, and the survival of the historic site. There are bound to be additions and subtractions; adaptations of the old to the new; and the word 'sensitive' is our accolade for the retention of historic character in line with new use. That 'sensitive' appears in the vocabulary of rehabilitation at all shows that we have learned something from the now fruitless search for Telford warehouses at St. Katherine's Dock!

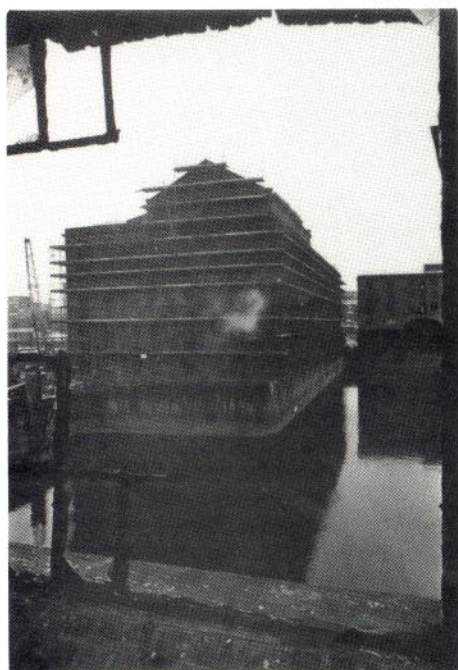
Thus the price to be paid for Albert's commercial viability is being revealed. The Maritime Museum sees Block D as its largest exhibit, so to speak, and so the form and function of the building rank high in the interpretation strategy. Yet parts of the mezzanine

must go to provide adequate headroom, and some walkways at mezzanine level be provided where there were never mezzanines before. Wooden infill and floors dating from the turn of the century, when Block D became an ice-warehouse and cold store, are also going. The late-nineteenth century curtain walls on the dock edge have already gone, and a glass screen will eventually appear set back behind the dock-side colonnade. New railings, where railings would once have hindered dock-work, will prevent the avid public actually falling into the dock. The one internal lift-shaft (it contained the only hydraulic jigger in the whole complex which still had its complete control gear) has come out to make way for a staircase, and the existing staircase will eventually come out to make way for lifts!

In the other blocks no work has been started though the first planning applications are awaiting approval. Basically, policy is to restore the whole of the building structure, but to replace with small-pane windows only those which face the dock itself. Windows facing outward will have large panes, and hoist doors will have angled windows inside the inner face of the walls. Investment money demands that the whole of Hartley's iron roof be replaced by steel to the same external profile. In Block E will be (subject to approval) a group of shops and restaurants, glass-screened from the public access area along the inner edge of the dock. A replica clock-tower (shades of Zisman) will occupy the original foundation on the top of Block E. The Dock Traffic Office will keep its huge cast iron portico (full external restoration), but the once impressive entrance hall will be halved to provide sufficient office-space to produce an economic return. None of these decisions would automatically escape the wrath of purists, but they are providing visible proof that Albert will live on for posterity. By August 1984 the Maritime Museum will have opened some of its Block D extensions, and the locks and dock will be welcoming the Tall Ships race and the arrival of historic ships for a moment at least. There will be some shops and eating facilities in Block E, and a safe perambulation route right round the inner edge of the dock. We may have to wait a little longer for the opportunity to buy a flat in Block C, overlooking the river; or to visit the Northern Tate Gallery in the same block. But no-one who passes the site can fail to notice the frantic progress now being made. So don't wait for the next report — put August 1984 in your diaries, and come and see for yourself that Albert is once again alive.

John Crompton

The Station now Departing . . . One of Scotland's earliest and finest railway termini will soon reappear as part of a major preservation complex at Bo'Ness on Forth. Opened in 1842 as the eastern terminus of the Edinburgh and Glasgow Railway, Harmarket Station has been extended over the past 140 years to serve passengers travelling northwards over the Forth Bridge and southwards via Carstairs as well as the twice-hourly inter city trains to Glasgow. The elegant and economical cast- and wrought-iron shelter erected to serve the E and GR's first passengers is currently being dismantled and moved 25 miles to Bo'Ness at a cost of £43,000, the sum being raised by the Scottish Railway Preservation Society. Grainger and Miller, the engineers of the E and GR, achieved some of the finest civil engineering structures seen on Scottish railways



at that time, including the imposing 36 arch viaduct across the Almond Valley and Queen Street Station in Glasgow, the most magnificent build up to that time in Scotland. The SRPS have a high standard to live up to in giving Bo'Ness as splendid a railway building as Edinburgh had in 1842. Completion of the move is expected this summer.

Tools of Science. A meeting at the Science Museum on 20 April, attended by some sixty people interested in historic scientific instruments, resolved to establish a society, provisionally named the Scientific Instruments Society, to bring together collectors, dealers, curators and instrument makers. The meeting was chaired by Gerard Turner of the Museum of the History of Science at Oxford, and various practical schemes for co-operation were discussed, including a speedy system of notification when instruments are stolen (so increasing the chances of apprehending the thieves) and the publication of an historical directory of instrument makers. The annual subscription to the new Society is likely to be about £10. The meeting was organised by Carole Stott of the Department of Navigation and Astronomy, National Maritime Museum, Greenwich, London SE10, who has agreed to act initially as Honorary Secretary until the Society meets to elect its first Executive Committee. Anyone interested in this welcome initiative, which fills a long felt need among those interested in the development of 'tools of science' is invited to write to Carole Stott, or telephone her on 01 858 4422.



*The Abercynon plaque
Picture by Michael Messenger*

Cap'n Dick Remembered. At a small ceremony in Dartford on Friday 22 April, tribute was paid to the memory of Richard Trevithick, the Cornish engineer credited with constructing the first workable railway locomotive in 1803. The gathering, organised under the aegis of British Rail Southern Region in Dartford, was to witness the placing of a wreath at the Royal Victoria and Bull Hotel, where Trevithick was living in comparative poverty and obscurity at the time of his death on 22 April 1833. The hotel's association with the Cornish Giant was marked in 1977 by the Trevithick Society when it arranged for the erection of a tasteful plaque in Cornish slate carved by the eminent St Ives artist and model-maker Dicon Nance. This year's ceremony to mark the 150th anniversary of Trevithick's death took place at the hotel rather than at the parish church nearby; although it is known that Trevithick lies buried there, the precise site of his grave has been lost in remodelling the churchyard.

Members of the Trevithick Society (an amalgam of the Cornish Engines Preservation Society and the Cornish Waterwheels Preservation Society) were offered free railway

tickets from Cornwall to attend the ceremony, but few took advantage of this generous gesture by British Rail because of difficulty in notifying the membership between Newsletters. The wreath was laid by Mrs Cherry Michell, great great grand-daughter of the engineer. Speakers at the ceremony included the Deputy Mayor of Dartford, Councillor Mrs R L F Povey who spoke warmly and knowledgeably of Trevithick's contribution to engineering and his generous personality and Rodney Law, Chairman of the Trevithick Society.

Popular interest in the achievements of this early railway pioneer continues to grow. The Welsh Industrial and Maritime Museum at Cardiff has built a full-size reconstruction of his Pen y Darren locomotive of 1803 and the success of this locomotive in winning a £500 wager for Samuel Homfray, one of her promoters, is commemorated in a memorial plaque, supported appropriately on typical tramroad platerail, outside the fire station at Abercynon. There are proposals to construct a working replica of Trevithick's 'Coalbrookdale' engine which shortly preceded that which achieved fame on the Pen y Darren tramroad.

Sources of Voluntary Help. Preserved railways and restoration sites are always in need of additional volunteers and I wonder how many readers are aware of the Countryside Commission Advisory Series No 11 'Volunteers in the Countryside' obtainable from the Commission at John Dower House, Crescent Place, Cheltenham, Glos GL50 3RA. It is doubtful if preservationists have made as much use as they might of existing sources of voluntary labour which may be available more or less 'on tap'.

Some of these sources which may be relevant are:-

1. British Trust for Conservation Volunteers, 10-14 Duke Street, Reading, Berks RG1 4RV (Reading (0734) 596171/2). 'In 1970 the Trust was created to absorb the work of the Conservation Corps and to broaden its aims to include work on recreation and amenity sites and industrial archaeological work'.

2. Concordia (Youth Service Volunteers) Ltd., 8 Brunswick Place, Hove, BN3 1ET (Brighton (0273) 772086). 'As yet, Concordia has not sent volunteers to work in the conservation and amenity field in this country. But as it regularly receives more volunteers than it can cope with (several thousand in 1978), it is anxious to extend its scope to include such work'.

3. Outset, 30 Craven St, London WC2 5BR (01-930 4255). Has permanent youth action projects in various parts of the country.

4. Prince of Wales' Committee, Sophia Gardens Lodge, Cardiff, CF1 9LJ. (0222) 373600. Concerned with 'increasing public awareness of the Welsh environment and with promoting and supporting voluntary projects in town and country. The committee can offer practical or specialist advice, grants for volunteer projects, donations of materials or loans of plant or equipment. Assisted projects have included canal restorations etc.'

5. Crusaders, 2 Romeland Hill, St Albans, Herts AL3 4GT. (St. Albans (0727) 55422). 'Events and activities are carried out on both national and area levels' Some local groups involved in 'conservation, recreation and amenity'.

6. National Association of Boys' Clubs, 24 Highbury Grove, London N5 2EA. (01-359 9231). 'The clubs are encouraged to carry out voluntary conservation and take a full part in local community interests. Requests for assistance should be directed in the first place to the above address'.

7. The National Association of Youth Clubs, PO Box 1, Blackburn House, Bond Gate, Nuneaton, Warwick CV11 4DB. (Nuneaton (0682) 61921). Widely involved in 'promoting, supporting and encouraging young people to do voluntary community work in connection with countryside projects'.

Student Community Action Resources Programme, 10-11 Percy Street, London W1 (01-636 0974 ext 61). Interested in encouraging student conservation and environment groups.

9. The Ministry of Defence has produced a pamphlet 'Military Aid to the Civil Community'.

Paul Hibberd

(Paul Hibberd is Under-Secretary (Publicity) to the National Railway Preservation Campaign.)

Construction History Group. Following a successful seminar held in September 1982 under the aegis of the Chartered Institute of Building, it was recently agreed to establish a Construction History Group for those with an interest in how the building process has developed and evolved. The history of design, architecture and structural engineering seem less likely to occupy the majority of the Group's attention. The distinguished architect Sir John Summerson has accepted an invitation to be the Group's Patron. Support services will be provided initially by the CIB. Further seminars and symposia will be organised (the first of these on 29 June 1983 in London) and an occasional newsletter is planned. The annual subscription is £5 for individuals, and £20 for corporate members. An executive committee will be elected at the first AGM. Further details and membership application forms from Peter Harbow, Head of Information, Chartered Institute of Building, Englemere, King's Ride, Ascot, Berks SL5 8BJ. Telephone: 0990 23355.

Conscious of the rapid rate of change in farming methods, the **Southampton University IA** Group recently undertook a pilot survey of Hampshire farm buildings, as a sequel to its earlier surveys of watermills, breweries, brickworks and other features. For this initial project, attention was concentrated on a tiny part of the county only, restricted to the parish of Durlley and part of Fair Oak. Having designed a standard reporting format, the Group divided up responsibility for the 36 farms among 21 surveyors (individuals or couples) and in less than a year the survey was virtually complete. In only three cases was access denied, a tribute to the care with which the initial approaches to farmers were made. No complete example of a Victorian model farm was found, but ten farms out of the initial list of 41 were considered worthy of a more detailed record in their present condition.

All those who contributed to the success of the survey, including of course the farmers visited, were sent a copy of the preliminary survey reports. On the basis of even such a limited examination, some generalisations have

been possible about the nature of farming in that part of Hampshire. The documentation produced in the course of the survey demonstrates the importance of careful groundwork and explanatory letter-writing before reaching for any door knockers. Copies of the findings of the pilot survey are available from the Group's President, Dr Edwin Course, Department of Adult Education, the University, Southampton.



AIA Directory of Local Societies and Kindred Organisations is currently undergoing revision following changes notified to the AIA Membership Secretary. An increasing number of societies listed in this Directory are now affiliated to the AIA and their profiles will continue to be published in this column for as long as the Liaison Officer receives information. The three described this time illustrate the variety of societies now affiliated.

The Dean Heritage Museum Trust was set up in 1981 to provide a museum on the theme of 'Man in Dean', which was formally opened in April 1983. The aim of the Trust is to become a multi-site museum using extant remains to interpret different aspects of the heritage of the Forest of Dean. The new museum at Camp Mill, Soudley, concentrates on four important industries, iron, coal, timber and stone, and also attempts to illuminate the geological and administrative background — the Crown as principal landowner, the medieval Verderers, the Mine Courts and the Free Miners. The Trust has now acquired a second site, the New Inn at Bream, which is a 16th century merchant's house. Contact the Secretary, Dean Heritage Museum Trust, Camp Mill, Soudley, Cinderford, Gloucestershire (0594-22170) or just visit the museum when you are in the area.

The North Western Society for Industrial Archaeology and History was founded in 1964 and is one of the largest IA societies affiliated to the AIA, with a membership of about 140. It is usually referred to as NWSIAH, pronounced to sound like nausea! Their Secretary, R J Webb, of 18 Boundary Lane, Heswall, Merseyside, writes:

'We have a monthly evening meeting, normally on the second Monday of the month, between September and April, when we have guest speakers to talk on a wide variety of IA subjects. During the summer months, we normally run three or four day-visits to places of interest; this year visiting Parys mountain in Anglesey, the Windermere area and the Colne Valley. We also have an interest weekend, held this year over the May Bank Holiday Weekend, when we visit an area and see as much as possible of interest in the locality. This year, we were in the North East, while in 1982 we were in the Bristol area. We also have visits to local items of interest, for instance, last month we visited the MDHC floating crane 'Mammoth'.

During the last nine months, we have been

surveying the remains of the hydraulic equipment in the Albert Dock Warehouses, prior to the extensive work, now in progress there. Previous major survey work has been sited generally in the South Docks, on the Maritime Museum site, around Edge Hill Station and Chatsworth Cutting. In addition, many members are progressing items of interest of their own.

All members are regularly circulated with the *Bulletin*, which advises forthcoming activities, reports on past meetings and visits and generally draws attention to items of local interest. We also publish the *Journal* annually, which contains articles on sites of note in this area.'

The Northern Mine Research Society is still thought of by many under its original title of the Northern Cavern and Mine Research Society. This was founded in 1960 to cater for a growing interest in cave ecology and hydrology, and in the history of the mining industry. Activities were at first centred on the recording of information concerning the mines in northern England together with the exploration and surveying of both caves and mining sites. The reference to 'Cavern' was deleted from the Society's original title in 1975 when it became clear that the bulk of the membership were mining historians rather than cavers. The Society is now only 'northern' in the sense that most of its officers live in that part of England; its activities and publications embrace the whole of the British Isles. Field meetings, both surface and underground, are arranged throughout the year. Members receive a very entertaining quarterly newsletter and have access to the Society's Library and Record Repository. Probably best known is the publication *British Mining*, which is made up of *Memoirs*, containing the results of members' researches into specific mines or aspects of mining, and *Monographs*, complete and authoritative accounts of individual mines or mining areas. (These are regularly mentioned in AIA Bookshelf.) Information about NMRS can be obtained from the Secretary, John H McNeil, 166 Irlam Road, Flixton, Urmston, Manchester M31 3NR, while publications are available from Mrs H Bird, 41 Windsor Walk, South Anston, Sheffield S31 7EL.

Depositing Records of Fieldwork. The present unsatisfactory position of the National Record of Industrial Monuments means that there is no generally recognised national depository for records of fieldwork in industrial archaeology. The Liaison Officer is trying to compile a list of depositories used by AIA Societies. Most naturally use the County Museum, but this can be complicated if a society's activities span several counties. For example, records made by the Manchester Region IA Society are deposited at the North Western Museum of Science and Industry (Greater Manchester material), Merseyside County Museums (Cheshire material) and the Centre for North West Regional Studies at Lancaster University (Lancashire material). The Liaison Officer would appreciate similar information from other societies.

Reports on Regional Conferences

EMIAIC 26 was organised by the Tramway Museum Society at Sheffield Industrial Museum Kelham Island, on 11th June 1983.

The speakers were **Peter Smithurst**, Keeper of Industrial Collections at the Museum on **The**

Historical Background, Dr Ken Barraclough on **Sheffield and Special Steels** and a member of staff from Edgar Allen Ltd on **Tramway and Railway Trackwork**. Delegates also toured the new Museum and the surrounding area under the guidance of Peter Smithurst. Chris Irwin of the Crich Tramway Society was the conference organiser.

14th Western IA Societies Regional Conference. On 26th March 1983 75 members and friends of IA Societies throughout South West England and South Wales met at their 14th Annual Conference. This was organised by the Exeter IA Group at the University of Exeter, and the main speakers and subjects were:

Lime burning and lime kilns	Eric Taylor BIAS
Iron Bridges in Somerset	David Greenfield SIAS
Dolcoath Mine 1906: sources for the construction of a model	Clive Carter Trevithick Soc.
Communications in the Gwendraeth Valley	Ray Bowen Oxford House IA Society
Roadside Stones today	Ted Masson-Phillips Exeter IA Group
Parish Boundary Posts around Stroud	Christopher Cox GSIA
Production of monographs on a limited budget	A Barrington-Brown South Wilts IA Soc.

Nine local IA Societies were represented at the meeting, under the Chairmanship of Walter Minchinton. Next year's Western IA Societies Conference has been arranged provisionally for Saturday 7th April at Bute Town, Cardiff.

Trevithick Society. Newsletter 41 has just been published and contains news of events and a long article on the Cornish Engine House preserved in South Wales at Scott's Pit.

Cleveland IA. No 14 of the Journal of the Cleveland Group is devoted to a site list of industrial archaeological structures in the Cleveland area. The report is divided into districts and each entry contains its grid reference and a brief description. Copies of the report can be obtained from the Honorary Secretary, Dr J C Rose, 17 Bedford Road, Nunthorpe, Middlesbrough TS7 0BY, price £1.00.

Sussex Industrial History. No 12 of the House Journal of the Sussex Industrial Archaeology Society published in 1982 features the tile kiln at Piddinghoe on its front cover. An article in the Journal by E W O'Shea describes the restoration of this kiln and a further article discusses the Baker family who were brick makers at the kiln. There are also articles on trams in Hastings, ironworking in Westfield and the Little Hampton swing bridge.

A more detailed article on the restoration of the Piddinghoe kiln is featured in the House Journal of the Llewellyn Group of Companies entitled 'The Grape Vine' Vol 24, No 1 for Spring 1983. This detailed article with superb photographs and drawings may be obtained by writing to the Editor of Grape Vine at Walker Llewellyn & Sons Ltd, 16-20 South Street, Eastbourne, East Sussex BN21 4XE.

Norfolk Industrial Archaeological Society finds itself orientated towards the county town, with most Winter meetings taking place in the Bridewell Museum at Norwich. Field trips to sites elsewhere in the county and working sessions at the Museum of Rural Life at Gressenhall and at Gunton Park Sawmill help to maintain an IA presence elsewhere in the county, but a branch of NIAS in Kings Lynn had to close recently when its active membership fell below 4. This demise was particularly unfortunate, when Kings Lynn is debating a controversial flood control scheme in the dockside area adjacent to the historic 18th century Custom House and authoritative opinions from industrial archaeologists are particularly needed.

The Society maintains steady progress with the restoration of the water-powered sawmill at Gunton Park (see Bulletin 8:1). A generous donation of £350 from the Friends of Norfolk Windmills makes it likely that the restoration of one of the two waterwheels will be almost complete by the end of 1983.

Broad Street Station Doomed. London's legacy of nineteenth century railway termini suffered remarkably little from the bombing of World War II, and although the complete rebuilding of Euston in the 1960s provided a **cause celebre** in the demolition of Hardwicke's Euston Arch, London probably still has more main line termini surviving from the Victorian era than any other European capital. Of these Broad Street is one of the least known, and last year when a scheme to replace it with shops and offices was discussed by the City Corporation, it was realised that the station had no listing as a building of special architectural or historic interest.

Levitt Bernstein Associates, the architects responsible for the widely-acclaimed conversion of Manchester's 1874 Royal Exchange (at 1.7 acres the 'largest room in the world') into an imaginative theatre, drew up a scheme to preserve the Broad Street terminus by converting the premises into a retail complex. The merits of this sensitive and enlightened scheme were put forward in a **SAVE** publication **Save Broad Street**, (Save Britain's Heritage, 3 Park Square West, London NW1 - £1.80). The plan would have restored the fine proportions of the 1864 building by removing the clumsy pre-war proscenium erected in concrete as part of a London Transport Underground link which spoils the principal aspect of Broad Street Station. The scheme actively lobbied by **SAVE** and by other amenity and conservation groups would have retained a human scale in a part of London literally overshadowed by the National Westminster Tower and other slab-sided edifices, while still providing a potentially lucrative shopping complex. But instead the Transport Minister, David Howell has given the go-ahead for total demolition on the Broad Street site. The services presently running into Broad Street will be diverted to a new railway complex based on the adjacent Liverpool Street site. Over the tracks will arise a new terminus, for which £300 million has been budgeted at 1983 prices. The approach to Broad Street from the north, at present elevated on a raised viaduct, will be dug out to correspond with the level of the tracks into Liverpool Street. The comprehensive redevelopment of the station site, although retaining most of the 1874 train sheds at Liverpool Street, will encapsulate them in a vast new shop and office block not due for completion until 1993. The commercial output

of the redevelopment is expected to finance the re-arrangement of the railway tracks and the improvement of pedestrian circulation inside Liverpool Street Station, which has always suffered from having been laid out as two sheds linked by an L-shaped foot tunnel. Liverpool Street Station's principal role is for commuter traffic, with its passengers arriving and leaving principally during the rush hours. A large proportion of them (60%) come to the station on foot rather than by underground train or taxi, and careful planning will be necessary to avoid disrupting this flow of foot traffic, which will spill from the concourse and pavements onto surrounding road if the building works prevent them from getting into and out of the station smoothly.

Where Angels Fear to Tread. Film companies can be a useful source of revenue and of publicity to IA societies and preservation organisations that control visually attractive engineering relics. The Nene Valley Railway, for instance, benefited handsomely last year from the use of its stations and rolling stock, in the making of the latest James Bond thriller 'Octopussy', due for release later this year. With its sophisticated financial deals, the film world is not one for the amateur to negotiate in. Gone are the days when a brief acknowledgement flashed up among the credits can be accepted as the film studio's debt to the lender of a historic vehicle or other machine; whereas the Liverpool Engineering Society may have been content with this for lending the uniquely important 1838 locomotive '*Lion*' for making 'The Titfield Thunderbolt' thirty years ago, owners now expect a more tangible recompense for the wear and tear and the technical expertise that they have to provide.

Properly handled, such contracts can be beneficial for both parties and at a time when tourist attractions are competing desperately for a higher share of the hard-hit leisure market, an airing on the big screen or on television cannot fail to boost their visitor numbers considerably. Societies likely to have facilities of interest to film-makers should study a recent 22-page publication published by the Historic Houses Association for their members and written by the HHA's President, George Howard who as a recent Chairman of Governors of the BBC is uniquely qualified to see both sides of the story. Although written specifically with BBC filming in mind and for the owners of historic houses, the booklet gives practical advice applicable in similar situations likely to be encountered by AIA members, for it includes suggested fees, a draft contract and hints on possible pitfalls, such as allowing photographers to take still photographs on your premises for which they will subsequently retain the copyright. Details of the HHA's **Film and Television Guidelines** are obtainable from the Historic Houses Association, 10 Charles II Street, London SW1Y 4AA.

Another useful source of advice on the rights involved in photography is the Museums Association, whose **Reproduction Fees, Photography etc - Guidelines for Museums** will shortly be available from the Editor, Museums Association, 34 Bloomsbury Way, London WC1A 2SA price about £1.

DoE Grants for Major Engineering Structures. The Secretary of State for the Environment, has announced that from 1 April 1983 funds are available under historic buildings legislation for the repair of important

engineering structures such as seaside piers, viaducts and bridges. As with other historic buildings, grants for these structures will be subject to advice from the Historic Building Council. They can be made only for those structures considered to be of outstanding historic or architectural interest or for structures the repair of which will contribute significantly to the preservation or enhancement of a conservation area. All enquiries should be addressed to the Department of the Environment, 25 Savile Row, London W1X 2BT.

Diploma in Industrial Archaeology. The diploma course provided by the Ironbridge Gorge Museum and the University of Birmingham through the Institute of Industrial Archaeology is now well established as a training course for those wishing to undertake or advance a career in industrial and science museums. To broaden its value, the regulations for admittance have been revised so that applicants need not have a first degree but may be admitted on the strength of their experience in museums, archaeology or related fields. Further information, a brochure and application forms are available from Michael Stratton, Institute of Industrial Archaeology, Ironbridge Gorge Museum, Ironbridge, Telford, Shropshire, TF8 7AW. Telephone 0952 45 3522.

Research Enquiry. From Robin Goodman, from the School of Communication at Trinity and All Saints College, Brownberrie Lane, Horsforth, Leeds LS18 5HD, comes an unusual appeal for information. In connection with a research project, he is attempting to find out about the training methods and facilities available to workmen employed in railway companies and locomotive builders from 1823 until 1923. Robin is particularly interested in the contribution of the companies themselves in apprenticeships etc, as well as outside organisations such as Mutual Aid and Improvement Classes, Mechanics Institutes, the Trade Unions, the churches and other educational bodies. He writes: 'Much material for this research was unfortunately swept away in the 1950s and 60s and other materials, training aids and models disposed of to outside bodies'.

In many cases they will have found their way into the hands of those with a particular interest in engineering history. Robin would now be glad to hear from anyone who has books, charts, models, posters, usual aids or any items showing how techniques and technology were taught.

A brief description would be useful to him, so that he can make arrangements to inspect or even borrow them in connection with his research project. As well as the railway industry, he is equally interested in associated fields of engineering such as traction engine or motor car building. As well as information on early training aids, anecdotal material or reminiscences would be welcomed and would all be acknowledged in the final version of the survey. If you can help, please contact Robin at the Leeds address above, tel. 0532 584341.

Early Tunnelling in Soft Ground. Malcolm Tucker writes: May I add to the information given by Paul Sowan (AIA Bulletin 10(1)). The construction of the sewer heading in Hyde Park (surely not two miles long) appears to have encouraged the Regent's Canal Company in pursuing its scheme to obtain water from the Thames at Chelsea by a heading of some 2½

miles to a pumping shaft at Paddington. This was provided for in their Act of 1812, but not surprisingly, it was subsequently dropped. The Grand Junction Canal Co had used similar but less ambitious arrangements through the chalk at Tring summit from 1804.

The first canal tunnel through the London Clay was at Greywell, Hants on the Basingstoke Canal (1230 yards, 1792-4, William Jessop consulting engineer). Those on the Regent's Canal in London followed 20 years or so later. Even earlier canal tunnels in Southern England included the Sapperton Tunnel, partly through the Fuller's Earth Clay in Gloucestershire (2¼ miles, 1783-1789, Robert Whitworth, engineer), and those on the Oxford Canal through the Lower Lias Clay in Warwickshire, (New bold 125 yards, and Fenny Compton 336 yards plus 452 yards but later opened out into cutting, 1775-8, Samuel Simcock engineer).

The information quoted for the Highgate Archway requires amendment, since its Act was not obtained until May 1810 (50 Geo 3c.88). The tunnel was still under construction when it collapsed in April 1812 an event probably not unrelated to its unusual four-centred cross-section. The engineer, Robert Vazie, had earlier undertaken the abortive Thames Archway from Rotherhithe towards Ratcliffe, (Act of 1805, abandoned 1809), and had been thrown off the job. (See Charles Lee, *'The East London Line and the Thames Tunnel'*, London Transport, 1976). 1000 yards of heading were dug beneath the Thames.

Probably the earliest scheme for a tunnelled crossing of the Thames came from Ralph Dodd in 1798, after his early proposals for the Tyne. He constructed an access shaft for a Gravesend to Tilbury tunnel before its abandonment in 1802. (See, for instance, J G James, *'Ralph Dodd, The Very Ingenious Schemer'*, *Transactions of the Newcomen Society* 47, pp 164-5, 1976). Marc Brunel's famous Thames Tunnel of 1824-43 never saw road traffic, and the first successful road tunnel beneath the Thames was the Blackwall Tunnel, constructed 1891-97 the first tunnel in the world to combine logically the use of compressed air and the Greathead tunnelling shield. (See the *Minutes of Proceedings of the Institution of Civil Engineers*, Vol 130, 1897 for a useful discussion of sub-aqueous tunnelling methods).

Incidentally, the 'North Hyde Works' undertaken by Joliffe and Banks to which Paul Sowan refers, are most likely to have been connected with the Ordnance depot next to the Grand Junction Canal at North Hyde, Southall, Middlesex. A canal dock was constructed there in the period 1813-18. It became known as the Hanwell Loop and one of its two former entrances is marked by a winding hole, at Grid Reference TQ 120 785 .

However, he made one error when he wrote of Kirkaldy's Testing and Experimenting works in Southwark. It was **David** Kirkaldy (1820-1897), who founded the works in 1865, not **Thomas** Kirkaldy. The works were moved from The Grove, Southwark to the present site at 99 Southwark Street, and public work began on 1st of January 1874.

David's son William George (1862-1914) was taken into partnership in 1884 at the age of twenty-six. On his death in 1914, William George's widow, Mrs Annie Kirkaldy took over proprietorship and appointed Dr Gillbert H Gulliver as manager. At this time David Kirkaldy, grandson of the founder was only four years old, and it was not until 1934 that he started at the works. When his Mother, Mrs Annie Kirkaldy died in 1938 David became proprietor, Dr G H Gulliver remaining with the firm till his death in 1950.

David Kirkaldy (grandson of the founder) is living in retirement in Brighton, and has provided valuable information about the family and the works.

You will understand my wish to put the records straight as Membership Secretary of the newly-formed Friends of Kirkaldy Testing Museum.

In conclusion, the motto within the pediment above the door of 99 Southwark Street reads, 'Facts not Opinions'.

Yours faithfully,

Peter Skilton, c/o 8 Festival Close, Erith, Kent DA8 2BH.

Allithwaite Upper Parish Council.

Dear Sir

The Council are obliged to you for forwarding a copy of your Bulletin Vol 10 number 3 1983 in which — on page 4 — there is a reference to the setting up of a trust relating to the John Wilkinson Monument which is in this parish.

I have been asked by the Sub-Committee to draw your attention to the error regarding the quotation of £324. This was for repair of the inscription plaque only, and grants for this have been received and the work done. The trust is being set up for the purpose of restoration — a much larger job which is likely to cost some thousands of pounds. At the moment, the Council are awaiting the views of the Depart-

ment of Environment on the estimate submitted by the sub-committee as being most appropriate.

Yours faithfully

Miss K G Hill

Clerk to the Council

'Kantara'

Cartmel Road

Allithwaite

Grange-over-Sands

Cumbria LA11 7QZ.

The *Spry* Leaves Worcester. Diglis Basin in Worcester said farewell to one of its most interesting boats in March when the Severn Trow *Spry* was raised from the muddy bottom of the basin where it had lain for the last thirty years. It was on its way to the Ironbridge Gorge Museum, where it will be restored and placed in exhibit.

The *Spry* was built in Chepstow, on the banks of the river Wye, in 1894. It was constructed from Canadian pitch pine, with oak beams, and rigged as a smack. The Severn Trow is flat-bottomed, enabling it to run with the tide up the Severn, drop its anchor when the tide turns, and as the water recedes, settle on the sand to await the next tide.

In 1914 the *Spry* was converted to a ketch and re-registered at Bristol. Then, after being sold to Jacob Rice & Son of Gloucester, it was used as a dumb barge plying between Avonmouth and Gloucester. It also carried wheat to the corn mill at Worcester. In 1950 the *Spry* was bought by Eric Rose, who towed it up the Severn to Diglis and converted it into a floating workshop. Here it remained, and after several more changes of ownership, sank to the bottom.

The Ironbridge Gorge Museum had for some time been considering the possibility of building a trow replica, and became interested in the prospect of restoring the *Spry*, which is probably the last trow in existence. They raised funds to finance the project and in March 1982 raised the trow from the basin for inspection. Satisfied by its condition, they decided to proceed with the scheme and in late March of this year the operation to move it to Ironbridge began. Under the expert guidance of Brian Waterscn and Steve Whitham from the museum, and with the aid of various ropes, pumps, pipes and firemen



Letters to the Editor

Dear Sir,

I would like to correct an error printed in Vol 10 No 2 of the AIA Bulletin.

Douglas Hague wrote in glowing terms about his visit to the AIA Conference in London last year. One had only to be with in a few feet of this man to realize the pleasure and enjoyment he was deriving from his visits.

from the Worcester Fire Brigade, *Spry* was hauled across the water to the dry dock. Then a huge steel frame was lifted by crane over the trow, and four straps were slung around the hull to lift it onto a thirty-eight wheeled low trailer, which was soon off along the M5 towards Ironbridge, where the unloading operation was also successfully completed.

Ironbridge Gorge Museum now plans to restore the trow over the next five years, for which money, expertise, and physical effort will all be required. Anyone who would like to help, or who has early photographs of the *Spry* or any Severn Trow, particularly under sail, should contact Steve Whitham, Ironbridge Gorge Museum, Ironbridge, Telford, Shropshire TF8 7AW (Tel: Ironbridge (095245) 3522).

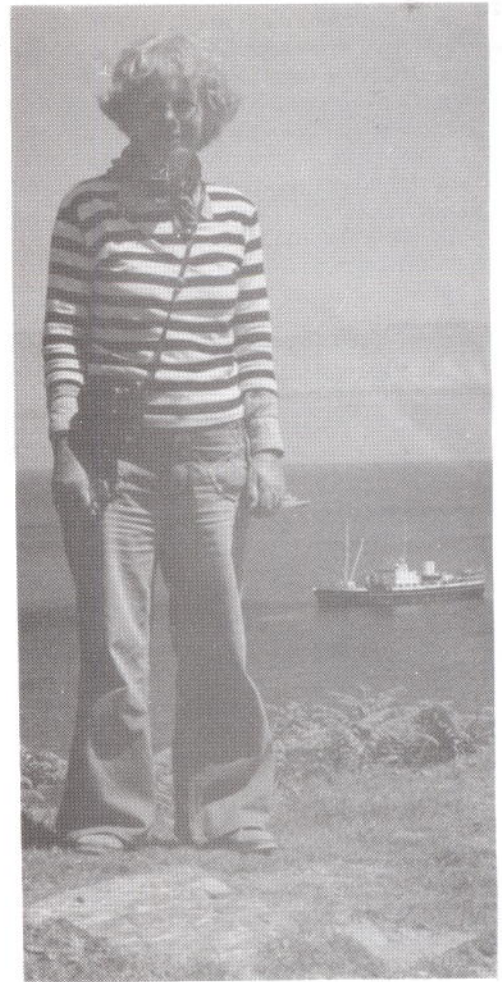
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Waterways World*

OBITUARY

Rosemary Christie. With the death of Rosemary Christie, in March 1982, the Association has lost one of its loyalest supporters, for Rosemary involved herself in the AIA from its foundation in

1973, seldom missed a conference and was looking forward to hosting the Annual Conference at Aberystwyth in 1984. In collaboration with Douglas Hague she produced the standard text on the archaeology of lighthouses and, more recently, the *Book of British Islands* published by *The Observer* newspaper. A person of wide talents, she learned to drive in a Bugatti and played ladies' ice hockey for England. She was successively secretary to two distinguished theatrical impresarios, Herbert Farjeon and Sir Seymour Hicks, and retained an informed and lively interest in the stage, proudly reflected in the acting achievements of her daughter Julie.

Her early married life was spent in Northern India where her late husband was a tea planter and where both her children were born. For a time she served as Lost Property Officer for the Darjeeling Mountain Railway, an experience which provided her with many amusing anecdotes. In later years her mobility was severely hampered at times by ill-health but her gentle and irrepressible humour never deserted her and even when in great pain she cheered and encouraged those around her. At the time of her death she was collaborating with Douglas on a



AIA Calendar

The John Grundy Bicentenary
September 23 1983

Continuing special events in celebration of the bicentenary of the famous Lincolnshire civil engineer. Lecture by Neil Wright at the Museum, Spalding commencing at 8 pm.n.

**13th North West and Yorkshire
IA Conference**
September 24 1983

NWIAC having gone trans-Pennine, the latest in the series will be held in Barnsley. Organised by the Barnsley Civic Society at Barnsley Technical College the programme will include talks on Joseph Lock (Railway Engineer) and Worsborough Mill, which will also be visited. Conference fee is £3.00 and bookings should go to Bill Thompson, 71 Albert Road West, Bolton, Lancashire BL1 5HW.

The John Grundy Bicentenary
October 8 1983

Lecture by Neil Wright in conjunction with the East Yorkshire Local History Society. Bell Hotel, Driffield at 11 am followed by a talk and visit to the Driffield Navigation at Riverhead.

Dartington IA Day on Lime-Burning
October 8 1983

Sponsored by the Exeter IA Group and master-minded by Walter Minchinton. Enquiries/bookings to Department of Economic History, University of Exeter, Amory Building, Rennes Drive, Exeter EX4 4RT.

Leather Manufacture through the Ages
October 15 1983

EMIAC 27. Organised on this occasion by the Northamptonshire IA Group. Speakers include; Sue Thomas, Dr L A Clarkson and Roy Thomson. To be held at the University Centre, Barrack Road, Northampton commencing at 9.30 am and concluding around 5.00 pm with visits to a working tannery and the Museum of Leather. Cost (including lunch and proceedings) £5.50 and bookings (before 14th September if possible) to R O'Rourke, 156 Spinney Hill Road, Northampton NN3 1DN enclosing a SAE for confirmation/directions.

Regional IA Lecture Series
September 1983 – April 1984

A ten meeting course on the Regional IA of the British Isles at Vaughan College, Leicester. Thursday evenings. Fee £7.50. Details from Dr M Palmer, 54 Chapel Street, Measham, Burton-on-Trent.

survey of early Christian memorials on Lunday and a short provisional account has since been published in her memory. Our picture of Rosemary on Lundy in 1980 encapsulates two main interests in her life, for the ship in the background is the Trinity House tender *Winston Churchill*, responsible for supplying and maintaining many of the lighthouses and lightships she knew and loved so well.

At the time of her funeral in Llanafan, donations to Oxfam were made in lieu of wreaths. Those who cherish her memory can do no better than to come to the AIA Conference in Aberystwyth in September 1984 to share her delight in the beautiful Ystwyth valley; our meeting there will be poorer for her absence.

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