Chapter Nine

D. Alan Stevenson 1891-1971 - Last of the line and lighthouse historian

Family recollections

David Alan Stevenson, or D. Alan as he was often called, was born on 7th February 1891, the eldest child and only son of Charles and Meta. He was born one year after the death of still-born twins.

Alan was a handsome child, but in early childhood he developed a stammer which he did not overcome until his mid twenties. The usual five years were spent at the Edinburgh Academy but like his cousin Louis he hated school games and his mother found excuses to let him off. His musical talents were obvious from his earliest years, and violin and piano lessons were substituted. He became a competent performer on both piano and violin, and an opera buff, attending the first performance in Edinburgh of Wagner's 'Ring' Cycle in 1910. While at University he enjoyed two 'Grand Tour' visits to Europe's capital cities, avidly seeking historic sites, concert halls, museums and art galleries. At home, he played golf and tennis with his father and his sister Frances.

At twelve years old he went on his first voyage on the *Pharos*. He visited the firm's office in George Street on a regular basis when, after shaking hands solemnly with the assistants, his father would set him to work on some useful educational task. His uncle David gave him every kind of assistance, and took him with him on many of his assignments, such as for the River Clyde, and also the River Ouse.

After school and Edinburgh University he passed the necessary exams to qualify as a B.Sc. Besides having a passionate interest in lighthouses this talented boy built up a unique collection of stamps, specialising in 'Cape Triangulars'. Later in life he wrote a book about stamps and then sold his entire collection for £10,000-a large sum of money in those days.

With the outbreak of the Great War in 1914 all the lighthouses ceased to show their lights unless they had been informed that British ships were in the vicinity and needed help. Foghorns were silent when fog rolled up the coast. Alan of course was eligible to be called up for the services but David and Charles put forward a case that he was needed by the Lighthouse Board as the lights were all still manned and much maintenance work had to be done. It was degrading and difficult for a young man to be seen still in 'mufti' in the middle of this horrendous war and many strangers were handing him 'white feathers' on the streets of Edinburgh.

The solution came in 1915 when he was required to go to the Dardanelles to place Charles's new invention-lightweight portable acetylene lights-round the coast in an effort to help the Royal Navy. A request had come from Admiral de Roebeck for somebody to be sent out. The Stevensons asked for a military rank to be given to Alan for this job and he was commissioned a Captain in the Royal Marines. When the task was finished he dispatched his mechanic assistant named Clark home by sea direct from Malta. He then decided to take a good holiday by himself and he travelled home through Italy and France taking several weeks en route. He was able to enjoy ten operas and in Paris he visited the Folies Bergère and the Pathé Gramophone Parlour.

He had been made an Associate Member of the Institution of Civil Engineers in 1916 and a year later, when he was 28, he completed his apprenticeship and joined the family firm on a salary of £100 a year. He was able to continue to wear his uniform for the duration of the war.

In 1923 Alan married Jessie MacLellan from Glasgow. Her father was an electrical engineer. They lived at 22 Glencairn Crescent. Rhoda Laura Helen was born in 1924 and Joyce Margaret Beryl in 1927. Robert Quentin Charles completed the family in 1932.

As his father and uncle David aged, Alan was able to help them both - by doing lighthouse inspection tours for David, and working together with Charles on the Clyde and other consulting business of the firm.

Alan was Honorary Secretary of the Royal Scottish Geographical Society and lectured for them. He was also an elected member of the Athenaeum in London. In his private life he belonged to six golf clubs, including Muirfield, and was Secretary to the Edinburgh Skating Club. He successfully broke the traditional Sunday Sabbath by creating a Sunday afternoon skating club at the Haymarket Skating Rink. It ran from 1926 to the start of the 1939 War. It showed his excellent organisational ability. It was strictly for the conventional closed society, still rigid in Edinburgh during the '20s and '30s. Following family tradition Alan was also a member of the Royal Company of Archers.

In 1929 Charles invented the 'Talking Beacon'. This enabled a ship to take its bearings from a radio signal-invaluable in thick fog. Charles gave half the credit for the idea to his son and indeed it was Alan who revealed the details at the first International Conference on Lighthouses held in London. The Talking Beacon attracted interest in the U.S.A., Canada and Scandinavia, and the Clyde Lighthouse Trustees took it on. As Engineers to the Clyde Lighthouses Trust, father and son were asked to deepen the channel of the Clyde for the launch of the Queen Mary and together they tackled this successfully. The ship negotiated the bends they had altered and sailed into the open sea in 1936.

The year 1936 was to end any possibility of the Stevenson dynasty continuing because Alan had grown impatient with the uncertainty of obtaining the post as Engineer to the Northern Lighthouse Board and he forced his uncle David to show his hand regarding this important matter. David, who of course did not have any children, seemed in good health although frail and showed no signs of retiring voluntarily. The only way David could resolve the situation was to break up the family firm by his own withdrawal from it.

David and his lawyer entered into legal battle with Charles and Alan. Telegrams flew from the offices of the firm, upstairs to downstairs, where the Nothern Lighthouse Board had its offices, and it was a panic situation for Charles and Alan with a 'NOTICE OF REMOVAL' hanging over their heads. Messrs Mackenzie and Kermack acted for Charles and Alan, and Messrs Tods Murray and Jamieson for David. By October there was a threat of actual eviction sent from the Secretary of the Northern Lighthouse Board, J. Glencourse Wakelin, and Charles and Alan had to pack their bags and remove to a few doors away at 90a George Street. The following letter was sent both to David and to Charles and Alan, as the tenants of the ground floor of 84 George Street:

'Northern Lighthouse Board,
84 George Street,
Edinburgh, 2, 15th October, 1936.
Dear Sir,

With reference to the enclosed official letter regarding your

vacation of the premises, I have been asked by the Commissioners to say that they greatly regret to learn that it has become necessary to dissolve the firm of Messrs. D. & C. Stevenson with whom they have been associated for so many years, and that they trust that the action which they now take will be construed as being unavoidable in the peculiar circumstances of the case.

Yours faithfully,
J. Glencourse Wakelin' [99]

The new partnership of A. & C. Stevenson lasted until Charles's retirement in 1940. Alan continued in the post of Engineer to the Clyde Lighthouses Trust up to his retiral in 1952, to devote his time to lighthouse and family research. He had already published *The triangular stamps of Good Hope*, a work that gained for him the Crawford Medal of the Royal Philatelic Society. In 1959 the *World's lighthouses before 1920* was published and firmly established him as the foremost authority on the historical aspect of early lighthouses.

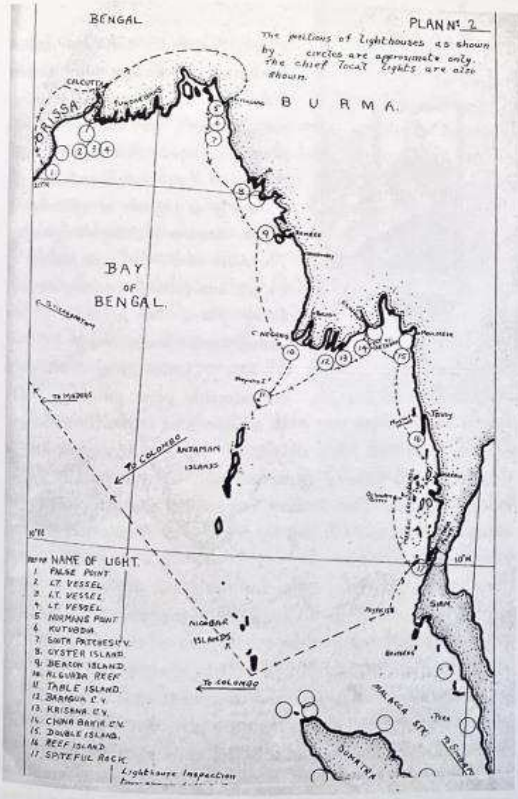
David died two years after the break-up of the family firm, but not before handing to his nephew all the historical documents dating back to the time of Thomas Smith and Robert Stevenson. He had great faith that Alan would be an excellent custodian for them and indeed he was. He added many relevant items to the collection and pursued his research with infinite care and patience, travelling all round the world. He died aged 80 with the work almost completed but not yet into the hands of a publisher. He liked to describe himself as a 'Technical Historian.'

David Alan died on the 22nd of December 1971. In 1993 all the valuable engineering papers, maps, &c. passed into the safe hands of the National Library of Scotland. The family Trustees named by Alan before his death accepted only a nominal sum for them.

A professional aspect

Alan was the last practising member of the Stevenson engineers. From 1908 he attended Prof. Sir Thomas Hudson Beare's engineering course at Edinburgh University. After graduating he was trained in the office of 'D. & C. Stevenson' until 1914. He then became an assistant engineer in the firm and a partner in 1919. In the same year he was elected a Fellow of the Royal Society of Edinburgh. The firm's work then, as before, was mainly concerned with river navigation improvements, harbours and piers, drainage and sewerage, water works, lighthouses and fog signals. Although the period of great development on harbours, lighthouses, and navigational river deepenings had passed and with it the greatest days of the dynasty, the firm still kept busy in these branches, for example on the River Clyde deepening, on sewerage and water supply projects, and more particularly on the modernisation of lighthouse and communications equipment.

In 1925 Alan with the support of his father, uncle, Prof. Beare and others became a Member of the Institution of Civil Engineers [M.I.C.E., a grade which changed to fellowship - F.I.C.E. in 1968]. His supporting statement read that *Mr Stevenson has devoted his life to engineering work, and has been specially engaged in optical and hydraulic science. His lighthouse experience extends to the erection of lights in this country and in the Eastern Mediterranean, and he has experience of ship-building and other marine engineering, such as harbours, and is specially versed in tidal phenomena and the action of works as affecting these*



[120] *Indian Lighthouses 1927. Plan 2 from Alan's report showing the site of Alguada Reef Lighthouse 1865 which was modelled on Skerryvore Lighthouse.*

phenomena, especially their action on the flow of rivers. Has contributed numerous, reports, articles, etc., on the works enumerated above, and has done special research work, probably unique, on tides and their phenomena . . . the Rivers Ouse, Forth and Clyde have been the subject of special investigation.

In 1926-1927, for the Government of India, Alan inspected and valued the lighthouses of India, Burma, Persian Gulf and Ceylon, more than a hundred in all, and advised on the organisation of a centralised lighthouse service. **[120]** In a comprehensive report he recommended the improvement of many existing lighthouses and the establishment of new ones.

In 1928 Charles and Alan, prompted by the earlier development of radio in navigation signals in the United States, developed and installed the first wireless telephone in Scotland between a lighthouse and the shore in their capacity as Engineers to The Clyde Lighthouses Trust. Their Talking Beacon invented soon afterwards and installed, at the Trust's Cumbrae and Cloch lighthouses, enabled the position of ships in the Clyde to be plotted from synchronised radio and foghorn signals. Alan in his unpublished presidential address in 1948 to The Watt Club[100] (now administered by Heriot-Watt University) *On the navigation of ships in fog*, commented that, *for the first time in navigation*, the new system gave *from one station alone the means of a ship obtaining her position from only one land station. The radio alone gives direction on any simple rotating radio receiver on board and distance is got by reading the time elapsed between hearing the same blast of air signal through a microphone by radio telephony and through the air.*

He continued, *The principle is that of thunder and lightning or of sound ranging. The lightning is transmitted instantaneously all round the horizon at practically all distances while the time of*


THE WONDER OF THE NEW TALKING LIGHTHOUSE

[121] *The New Talking Lighthouse. Charles and Alan's invention as shown in This and That, 14 February 1931,10.*

receiving the thunder through the air is in proportion to the distance of the observer from the source of the disturbance. The rate of travel of sound through the air is about 5.5 seconds per mile . . . Instead of the seaman requiring to measure the time lag by stop watch, a gramophone record is operated at the lighthouse at which the radio signal and air fog signal are operated. The radio signal even incorporates directions for its own use. At Cloch Point Lighthouse the record transmits the following signal by radio repeated every 50 seconds. "Cloch Point lighthouse speaking. At the instant when you hear through the air the commencement of the second blast of this fog signal your distance in cables from this lighthouse is stated on the radio". This is followed by counting in speech in cables from 1 to 30 or 3 sea miles.

The system has been long in advancing and there are still [after 20 years] *only the two Clyde stations in service in Britain. The United States at once adopted the idea but they do not use the gramophone record and require that a ship's captain should use a stop watch and listen for a telegraphic impulse to represent the zero or moment of seeing the lightning. There are now 74 of these stations in U.S.A. and Canada and they are now being fitted in rapidly by the Scandinavian countries.*

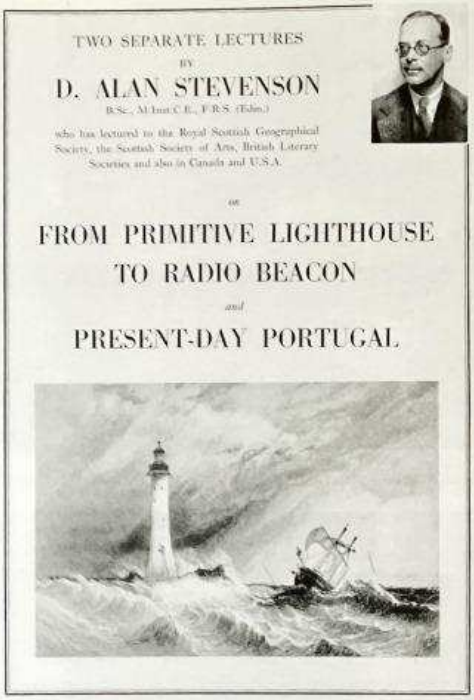
The innovation attracted considerable press publicity. **[121]** In a paper read to the Royal Society of Arts in 1931 Alan illustrated the system as installed at Cumbrae and gave a demonstration by gramophone of its talking beacon. The Society recognised this achievement by awarding Alan and Charles its prestigious *Thomas Gray Award*, including £100 each.

In 1936 the firm, again for the Clyde Lighthouses Trust, successfully advised on and superintended the skilfully engineered deepening of the existing curved channel of the river Clyde to about 30 ft. from Port Glasgow westwards for about 3 miles to enable the largest new ships to go to sea. **[113]** Most of this work fell to Alan as the most active member of the firm. The skill came in rejecting the alternative most certain to meet the objective, which was, straightening the channel at more than ten times the cost. By the time Alan retired as Engineer to the Clyde Lighthouses Trust in 1952, Stevenson engineers had

served the Trust for a continuous period of more than one and a half centuries.

By the time of his retiral Alan had become increasingly involved in historical pursuits, an interest which can be traced back to an article 'Early Scottish Lighthouses' in *Chambers Journal* in 1917. His Royal Society of Arts lecture of 1931, which was subsequently repeated in Baltimore and elsewhere, also had an historical element. **[122]** However, it was not until 1949 that he published his first full-length book - an account of Robert's *English lighthouse tours 1801 1813 1818.* **[123]** In 1959, based on family records and seven years of intensive research and travel, Alan produced his authoritative, although referenceless, *magnum opus* on *The World's Lighthouses before 1820.* **[124]**

It was in March 1966, when Alan was working on a book which he did not live to complete, *Some Records of R.L.S.'s Family of Engineers*, that the author first met him at his Great Stuart St. office. On the first visit he was courteously received as a fellow civil engineer with an interest in engineering history, and tantalised by a glimpse of part of the family's wonderful engineering archive (now in the National Library of Scotland), but not allowed to look at anything! On another occasion the visit was terminated only minutes after it had begun after the author had suggested that it would be instructive to have known which books Robert had thought it worthwhile to include in his office library. On further visit in 1970, when Alan's office was being wound down, deep discussion ensued on the use of the office's eidograph made for Robert by Adie of Edinburgh for copying, reducing or enlarging plans, and also, on Lord Stuart de Rothesay's facilitation of Alan's visit to the lighthouses and


TWO SEPARATE LECTURES

BY

D. ALAN STEVENSON

B.Sc., M.Inst.C.E., F.R.S. (Edin.)

who has lectured to the Royal Scottish Geographical Society, the Scottish Society of Arts, British Literary Societies and also in Canada and U.S.A.

on

FROM PRIMITIVE LIGHTHOUSE TO RADIO BEACON

and

PRESENT-DAY PORTUGAL

[122] *Prospectus for Alan's lectures c. 1932.*

workshops of France in 1835!

Alan's most important work was probably that for the Clyde Lighthouses Trust, but he deserves to be remembered not so much for his engineering achievements as his painstaking historical work which led to him becoming the nation's, if not the world's, foremost lighthouse historian of his day. **[125]**