

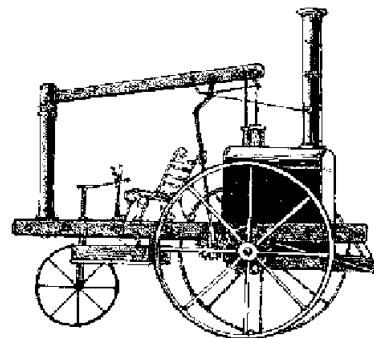
The Murdoch Flyer Project

NEWSLETTER

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www.murdochflyer.org



TOUCH-SCREEN COMPLETES FLYER DISPLAY IN REDRUTH



A touch-screen display, designed to our specification by Tell Systems Ltd of Plymouth, has been installed alongside our replica locomotive in Market Way, Redruth. The display, which cost £4630, was funded with the help of a grant of £4200 from Kerrier District Council which we received in March 2008. The touch-screen provides an interactive presentation for the public about William Murdoch's life and achievements. The computerised part of the display was the work of Matt Hawkin, Tell's software designer. The timber casing which houses the touch-screen, computer and ancillary equipment has an ash finish similar to the timber used for the locomotive and wagon and was constructed by our vice-chairman Keith Dinham. By touching the appropriate "post-it" label, the viewer can access information about the

Murdoch Flyer project, William Murdoch, where he lived and is buried, his employers James Watt and Matthew Boulton, Murdoch House, The Cornwall Centre, the Tregellas Tapestry and the Cornish World Heritage Sites. There is a photo album which shows our static replica, the one-third scale prototype locomotive and various stages in the design, building and commissioning of our full size replica locomotive. A video display includes the various Flyer locomotives in steam. The illustration top left shows Matt Hawkin making final adjustments to the touch-screen computer programme. This touch-screen is capable of

being linked with other local touch-screens, such as the one in the Cornwall Centre, if the necessary capital expenditure can be made available by the local authority or another body for a remote control facility. The picture above right shows Matt Hawkin formally handing over the touch-screen installation to Keith Dinham, Vice-Chairman of the Murdoch Flyer project. On the right of the picture is Simon Budd, Managing Director of Tell Systems Ltd. The touch-screen enhances our display and provides much more information than the laminated display which we have provided in the past. However as the touch-screen is usually viewed by only one or two people at a time, we have decided to retain the laminated display for the foreseeable future.



Information Board at Tesco`s

When our large static replica locomotive was placed on the roundabout near Tesco`s in Redruth in 2000, we made and displayed an information board about the project nearby. It served its purpose of telling people what the replica is and gave limited information about William Murdoch and the Flyer project. Over the intervening years, it has gradually faded, deteriorated and become outdated. In September 2008, following discussions with the manager of Tesco`s store, we made a new, larger information board and have mounted it on the wall inside the store adjacent to the entrance. It is sited below the plaque which commemorates the opening of the store. We are very grateful to Tesco`s for allowing us to place this information in such a prominent position where it is now protected from the effects of the weather.

Three specially designed sign posts



directing the public to the Murdoch Flyer display have been purchased and added to existing signs in the town centre. The double-sided signs were cast to our design and finished in the town colour of burgundy. They are situated in Fore Street near the town clock, in Fore Street near Murdoch House and on the corner of Alma Place near the railway station.



Murdoch – the man

“Physically he was an impressive figure: strong and muscular, around six foot three inches tall and handsome with a large, well-shaped head and wide smiling mouth. His hands were ideal craftsman`s hands with their strong, spatulate fingers giving a high degree of manual dexterity. He seems to have had little time for religion and politics and there are no anecdotes to show whether he had a sense of humour although his features suggest a person who was no stranger to laughter”. From “The Scot Who Lit The World” by Janet Thomson (a Friend of the Flyer).

Murdoch`s Locomotives

William Murdoch`s Locomotive No. 1 had a cylinder $\frac{3}{4}$ ” diameter and features in a letter from Matthew Boulton to James Watt dated the 6th August 1784:- “I have had a little conversation with Murdoch about Wheel carriage..... I think a very light and cheap modell might be made takeing one of our drawn tubes of an Inch diameter to make the cylinder of.” The style of letter suggests that Boulton was going along with the locomotive idea, even if humouring Murdoch, and suggesting another model made of B & W materials, i.e. Locomotive No 2. Watt didn`t take to supporting the steam locomotive but his concern at the possibility of losing Murdoch was shown in his letter to Boulton of the 28th August 1784:- “My only reasons against it were that I feared it would deprive us of a valuable man; that it would divert us from more valuable business, and perhaps prove a sinking fund; and lastly I did not like a scheme I had resolved round in my mind for years... should be wrested from me or that I should be compelled to go into it as a secondary person..... Evidence of Locomotive No 2 in 1791 with a 1” diameter cylinder showed that Murdoch continued with its design and development despite the discouragement he had received from both Boulton and Watt. It was this model which Murdoch was taking to London in order to take out a patent when he was met by Boulton near Exeter and persuaded to return to Cornwall. On 10th October 1803, Trevithick writes to Davies Giddy about a carriage: “I have desired Captain A Vivian (cousin) to wait on you to give you every information respecting Murdoch`s carriage, whether the large one at Mr Budge`s foundry (at Tuckingmill) was to be a condensing engine or not.” This would be Locomotive No. 3 (the prototype of the Murdoch Flyer).

Acknowledgement: the above information is extracted from “William Murdoch, Mechanician, Maverick & Medallist” by John Richard Taylor, C.Eng., M.I.Gas E. Consultant Gas Engineer, Grosvenor Place, Bath. This presentation was made to the Manchester District Junior Gas Association at Manchester on 10th July 1991 and to the Gas Association of Wales at Cardiff on 29th April 1992. Copies are available in Redruth libraries. John Taylor is a Friend of the Flyer.

A William Murdoch Mystery

This was the title given to an article written by Sir Ronald East which appeared in the publication Model Engineer on 2nd December 1977. The mystery to which he referred was whether Murdoch ever made and operated anything much larger than his original small engine which was fully described in an excellent article in The Model Engineer on August 15th 1902 under the heading "The First Locomotive Ever Made In England". The original article says that "There is good evidence that altogether Murdoch constructed three locomotives, the last of considerable size but under pressure from Watt, ultimately abandoned the invention". Sir Ronald also wrote "In 1804, seven years after Murdoch left Cornwall, an unknown artist produced a finely-drawn engraving showing a man driving a road carriage about twelve times the size of Murdoch's original model. It is not impossible, allowing for artistic licence, such a machine would work..... If Murdoch ever made a passenger-carrying engine, it might have been a geared down version of what is illustrated but the artist obviously knew nothing of it". What would he have thought had he seen our full size replica of Murdoch's locomotive running under steam?

The Flyer Project's Locomotives

We have been asked by a Friend of the Flyer to clarify details of the locomotives built by the Flyer project. Quite a few years ago, Nigel Eden built a steam driven replica the size of Murdoch's original model. The first locomotive constructed by the project group in 2000 was the large static replica which is displayed on the roundabout by Tesco's store in Redruth. The project team then built and tested two 1/3 full size replicas during 2002-2003. One had a vertical boiler design and the other a horizontal boiler. After carrying out trials first using compressed air and then steam, we decided to adopt the horizontal boiler design. This 1/3 full size locomotive was fully commissioned and is displayed running under steam on our website. We started to build the full size working locomotive in 2004. It was demonstrated running under steam for the first time on Murdoch Day 2007 and is the replica on public display in Market Way, Redruth.

William Murdoch – National Railway Museum

Fact Sheet 3, issued by the National Railway Museum, states "William Murdoch was the first person in this country to build a moving steam engine. This was a small three-wheeled locomotive model. Murdoch was rather overshadowed by his famous employers Matthew Boulton and James Watt but was a very talented and gifted engineer. Murdoch lost no time in setting out for London to take out a patent for his model. Boulton happened to meet him at Exeter however, and as it did not coincide with the ideas of the firm to lose the services of their best engineer in this fashion, Murdoch was persuaded to return. Writing to his partner, Boulton said; "He hath unpacked his carriage and made it run a mile or two up and down in River's great room, making it carry the fire shovel, tongs and poker. I think it fortunate that I met him as I am persuaded I can cure him of his disorder or turn the evil to good".

From this letter it is clear that Boulton had no great opinion of steam carriages and their possibilities. James Watt did not want Murdoch to develop what he considered to be his idea. Although Murdoch did not leave the matter there, it helps us to understand why his locomotive design was never fully developed and why it was left for others to progress the technology and gain recognition for it.

Project Team Profile – Peter Glass (Honorary Member)

Peter Glass is a Senior Design Engineer for Thames Water and lives in Reading. He was inspired from childhood by his great aunt Margaret Murdoch to take pride in his descent from William – she was his great grand-niece. We were introduced to Peter in 2001 soon after we started this project. Peter's family became our first major sponsor and due to the help and encouragement he gave us, our project committee elected him an Honorary Member of the Murdoch Flyer project in 2001. Peter has visited Redruth on many occasions and formally opened the Murdoch Day festivities in 2005. He was a speaker at the Kew Bridge steam museum when we arranged an exhibition and seminar to mark the 250th anniversary of William Murdoch's birth in 2004.

Flyer Displays 2009

The full size replica is due to undergo its annual boiler inspection and steam test during April and it will be removed from display in Market Way for preparation and test when the dates are confirmed by our boiler inspector.

The project committee is planning to display the full size replica locomotive operating under steam as follows during 2009 and we will be pleased to meet as many of our Friends and supporters as possible at these events:

Murdoch Day, Redruth, Saturday 13th June. Arrangements are confirmed for us to display the full size replica in steam and demonstrate it running in a large display arena in the car park in Penryn Street. Our thanks to the Royal British Legion, Redruth, for their co-operation.

The Boconnoc Steam Fair, Friday, Saturday and Sunday, 24th, 25th & 26th July.

We are planning to display the full size replica locomotive in steam at this popular annual Cornish steam rally which is held on the Boconnoc Estate at Middle Taphouse, near Liskeard.

At most other times, the locomotive and wagon are on public display in Market Way, Redruth.

Some Other Flyers

The Cleethorpes Coast Light Railway in North East Lincolnshire is the East Coast's last surviving seaside 15in gauge steam railway. A part of the Sutton Collection, the "**Sutton Flyer**" is a 1950 Bassett Lowke/Hunt 4-4-2 locomotive forming part of the motive power. Built in 1948 as a 10.25in line, it was converted in 1972 to 14.25in and then to 15in gauge in 1994.

The "**Dutch-flyer**", formerly known as the Amsterdam Express, is a rail and sail service providing travel from Harwich in the UK, across the North Sea to The Hook on a Stena Line HSS (High-speed Sea Service) state-of-the-art craft and on to any Dutch city with a rail station.

In the literary world, the "**Sholtie Flyer**" is a novel set in the post-war years by Frances Paige. It is a sequel to Men Who March Away – The McGrath Saga.

Project Website: www.murdochflyer.org



Our new website has received many favourable comments and we thank Mrs Pat Parry, of Cornish Computing, for her help in keeping it updated. It contains lots of information, photographs and video clips. If you have not yet visited it, we invite you to do so and let us have your comments and suggestions.

Friends of the Flyer

We are very grateful to all our Friends who have paid their subscriptions for 2009 and to all who sent us donations in addition. If you have not yet paid, we look forward to receiving your subscription. The donations received from our Friends will enable us to keep the annual subscription at £5.00 in 2010. We thank everybody who responded to our recent enquiry and we will reduce our future postage costs by sending some of our newsletters to Friends by email. Our aim now is to display the replica steam locomotives and the wagon to the public and inform as many people as possible about William Murdoch's achievements. Our annual cost of boiler inspections, insurance, workshop, materials, electricity, transport etc is in the region of £3,000.

We desperately need additional people to come and help us. We all have limitations and younger people could assist us with some of the heavier manual work that is necessary from time to time. Preparing, loading, transporting and displaying the replica locomotive will become more difficult for our older members in future years. We also need help with fund raising activities. Anyone wishing to become involved with this project, to join our project team or support us by way of sponsorship or donation please contact:

The Murdoch Flyer Project, 94 Albany Road, Redruth, Cornwall TR15 2HZ. Tel 01209 212971.