

The National Railway Museum in York

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Introduction

The last 2 years have proved to be one of the most memorable in the history of Britain's National Railway Museum (NRM)—2004 started with a successful campaign to acquire what must be the world's most famous steam locomotive, *Flying Scotsman*. The project followed a fundraising exercise that revealed the huge public support for this icon of British railway history. In May, the *City of Truro*, the oldest locomotive licensed to run on Britain's main lines, re-enacted its record-breaking 100 mph run of 100 years ago in a tour of the West Country. This was closely followed by Railfest, a gathering to celebrate the 200th anniversary of steam locomotion. The event brought together the new and the old from Britain's railways and attracted more than 70,000 people over 9 days. July 2004 saw our first programme of main-line train operations for many years. Over the following two summers, *Flying Scotsman* carried 40,000 passengers on

the 200-km round trip to the coastal resort of Scarborough.

2004 also saw the opening of the Yorkshire Rail Academy, our joint venture with York College to provide schools services and vocational training for the railway industry. It adds another facet to the wide range of education services that the NRM offers.

Whilst all this was going on, final preparations were being made for completion of our new visitor attraction 100 km north of York in Shildon, County Durham. *Locomotion, The National Railway Museum at Shildon*, was opened by the Prime Minister in October 2004 and saw more than 200,000 visitors in its first year of operations. Back at York, visitor numbers continue to run in the 750,000–850,000 bracket each year, making the NRM the most-visited museum in the country outside London. 2004 was by any standards a remarkable year. By contrast, 2005 has been a little calmer and is characterized by the laying of plans for future projects, with planning commencing in earnest for the Museum's

next 10 years. We are beginning to shape ideas for a new generation of displays, commencing with *The Flying Scotsman Story*, an exhibition, to be launched at Easter 2006. Fundraising is well in hand for a major overhaul of *Flying Scotsman*, which is commencing in early 2006. Fundraising has been largely completed for the new *Search Engine* centre, which if we are successful, will bring tens of thousands more users to our unparalleled library, artwork and archive collections. Construction starts in late spring 2006.

At the same time, planning for the development of York Central, the 40-ha site surrounding the NRM is beginning to crystallize. When this proceeds in 3 to 4 years, it will totally transform the area around the Museum, placing it at the centre of a new commercial and cultural quarter for York, ensuring that the NRM will continue to be the leading heritage attraction in the Yorkshire region.

The above gives some idea of the breadth and level of activity at the NRM. The rest of this article provides some background about the Museum—where it has come from, the activities it undertakes, its collections and challenges for the future.

The Museum in York

The NRM is based in York, a small but historically very important city located 320 km north of London. York has been a centre of regional government since Roman times—2000 years ago. In the 19th century, its entrepreneurs made the city a major hub in the emerging railway network. Industry arrived in the sharply contrasting forms of the manufacture of chocolate and of railway equipment, but York was not destined to become one of the burgeoning northern mill towns that led Britain's industrial revolution. Its growth in the 19th century was limited and, as a result, its historic centre has been preserved to a significant extent.



The series zero bullet train, the world speed record steam locomotive *Mallard* and the Channel Tunnel display, incorporating a *Eurostar* mock up in the NRM's Great Hall (NRM)

Today, railway manufacturing has all but disappeared, some chocolate now comes from eastern Europe but Nestle's factory, its biggest, and the birthplace of the world-famous Kit Kat, Polo and many other brands, still buzzes with activity. New industries in the fields of information technology and biotechnology have emerged. York University sits consistently at the top of quality league tables along with Oxford and Cambridge and the heritage environment means that 10% of the city's economy is based on tourism. Voted Britain's favourite city destination in 2004 by readers of one of Britain's national newspapers, York attracts more than 4 million visitors per year. The heritage has also brought its own industry with many small companies in the city designing and producing interpretative and multimedia installations for museums and exhibition centres worldwide.

The NRM benefits from its location in York, a small but much-visited city. Although the Museum is in former industrial buildings outside the city centre, it is still within easy walking distance of York Minster and the core of the medieval city. It is also very close to York's main railway station. As a consequence, the Museum is seen both as a destination in its own right and as part of the portfolio of historic attractions that visitors to York can experience.

Origins of National Railway Museum

In many countries, the main railway museums have been set up by the railway operating organization, providing a home for the company's own collection of historic material. While this was also true in Britain, the position changed in the 1970s and means that the NRM occupies an unusual position compared to the standards of other railway museums—as a museum essentially owned and largely



Prime Minister Tony Blair at the opening ceremony for Locomotion in October 2004

(NRM)

funded by Britain's Department for Culture, Media and Sport.

Fundamental changes to Britain's railways took place following the 1963 Beeching Report, which brought a business and economic focus to Britain's railways. Underused lines were closed and the freight business shifted its outlook away from the common carrier approach towards containers and trainload traffic. At the same time, the railways were encouraged to focus on running trains and to give up peripheral activities like shipping, bus operations, hotels and, of course, operation of museums. At that time British Railways (BR) had three museums: its own museum in York, a partnership with London Transport in the Museum of British Transport in Clapham, south London, and with the local authority in Swindon where a museum of the Great Western Railway (GWR) had been recently opened.

The 1968 Transport Act gave BR an exit route from its museum operations by encouraging nationalized transport industries to transfer their collections to

the Science Museum in London—subject, of course, to a satisfactory financial arrangement. The Science Museum already had rail collections of its own and was seen as the natural partner for BR. The old York and Clapham museums were closed and the new National Railway Museum opened in 1975 in York on a new site converted from the city's former steam locomotive depot. Ownership of the collections and of the new museum was transferred from BR to the Science Museum, which was an integral part of the Department of Education and Science at that time.

This development was notable for two reasons. First, whilst the UK had a long tradition of national, government-funded museums, these had all been in London. The National Gallery, the British Museum, the Victoria and Albert Museum all lay at the centre of British cultural life. The idea of a National Museum outside London appalled many and thrilled others. The eventual success of the new NRM silenced the critics and encouraged other National Museums to work with regional



The turntable, one of four which the building housed in its days as a locomotive repair and stabling depot, and which now forms the centrepiece of the Great Hall displays (NRM)

authorities to establish new museums outside London.

Second, unlike its parent Science Museum, the NRM found itself responsible for a collection spread all over the UK. Apart from the Swindon Museum (which was now operated solely by Swindon), BR had loaned materials to many other museums and to several of the growing number of heritage railways. For example, a new museum in Darlington opened in 1975 and provided a home for several national-collection locomotives and carriages. As a consequence, the NRM saw itself as part of a network of railway heritage organizations, developing a rather different culture from the slightly aloof approach of many other National Museums.

Present Constitution of NRM

Today, the NRM remains part of the same organization as the Science Museum. With the passage of time, administrative

arrangements have been changed. The Science Museum and its two 'daughter' museums, the NRM and the National Museum of Photography, Film and Television opened in 1984 in Bradford, are now 'sister' organizations under a Board of Trustees that operate at arm's length from government. Responsibility was shifted from the Department for Education and Science to the Culture Department in the mid 1980s. The Trustees receive an annual grant from government that they allocate across the three museums. Commercial income from retailing, catering, conference hire and a host of other activities supplements grant aid to help offset running costs. Development of the museums, new exhibitions, extensions and major purchases for the collections must be funded by seeking funds from external supporters and grant agencies.

The Mission

The NRM's parentage, as a government-

funded museum within a family of public museums means that its role and mission are perhaps a little different from many other railway museums. Compared with some company-owned museums, the NRM's role is a more detached one—to be an external observer of the railway, rather than an integral part of the industry. The NRM shares its primary objectives with all of the UK's national museums. It is essentially an educational institution, charged with developing public understanding of its subject and, in particular, the impact that the railway had on Britain's economy and the life of its people. The NRM's formal mission statement is as follows:

We will engage people and inspire learning about the world of railways through our collections and the knowledge they hold.

This sets out our educational purpose, makes it clear that our activity is based around the collections of the museum and the knowledge they hold and reminds us that we must engage people if they are to get the most from the museum.

The educational agenda is key, although the mantle is worn lightly. Most of our users are the general public and have no formal education agenda of their own but our aim is to ensure that, while they are having a good time at the museum, they are able to benefit from our learning agendas.

Some users, of course, have a more formal learning agenda and our aim is to provide a range of educational services for them. These more specialist services are described in detail below.

To deliver its mission, the NRM focuses on four key objectives:

- Caring for and giving public access to collections
- Operating a leading international museum, providing a compelling visitor experience

- Providing relevant programmes and services for the widest range of learners
- Providing education, interpretative and curatorial services for diverse audiences nationwide away from York

In practice, each of these activities overlaps the others but the headings provide us with a useful framework in which the Museum's planning and delivery of its activities takes place. Following a description of the site and of some of the key objects in our collections, the rest of this article explores each of these functions.

Site Description

The NRM site is based on a number of former railway buildings, although several have been very much rebuilt to meet the needs of their new role.

The Museum's *Great Hall* and adjacent *Works* complex are housed in what was the main steam locomotive maintenance depot in York. At one time, this building, erected by the North Eastern Railway (NER) in the early 20th century, housed no less than four turntables and their associated storage tracks, providing undercover housing for more than 100 locomotives. Part of the building was converted into a straight-tracked diesel maintenance depot and this subsequently became what is now the *Works*, housing the *Warehouse* collections centre and the Museum's conservation workshops.

The main part of the building, which served as a steam depot until 1967, still retains one turntable in the 10,000-m² *Great Hall*. The turntable is one of the Museum's most attractive features for the public. This wonderful object, once commonplace on our railway system but now very rare in Britain, provides visitors with a twice-daily spectacle when it is demonstrated.

Both the *Great Hall* and *The Works* buildings have been very largely reconstructed and retain only the ground plan to indicate their former use. By contrast, the Museum's other large display space, the *Station Hall*, retains much of its atmosphere as a former railway freight depot dating from the 1880s. Its long parallel platforms have the atmosphere of a terminal passenger station, although the building served for freight purposes during its working life. The railway atmosphere of the *Station Hall* is in contrast to the rather more clinical atmosphere of the *Great Hall*. The two are separated by Leeman Road, named after George Leeman, the NER Chairman when York's magnificent curved station was constructed under Thomas Prosser's overall roof in the 1870s.

In effect, the NRM operates on two separate sites divided by Leeman Road but linked by an underground passageway. This is not an ideal arrangement and

results from the Museum's steady expansion over the years. The York Central redevelopment plan for the area around the Museum envisages rerouting Leeman Road, providing the Museum with a unified site, but it will be some time before this is achieved.

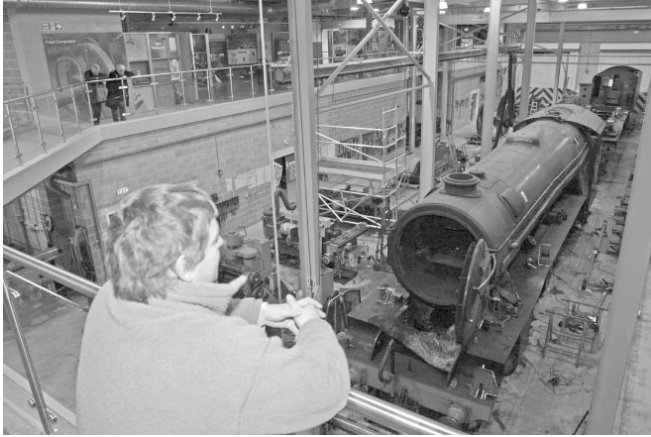
Some Key Objects

Because the NRM was formed by combining the rail collections of BR and the Science Museum, the material covers incredible breadth. For example, the Science Museum acquired the remains of Stephenson's *Rocket* (built in 1829) when the museum was first set up in 1857, but *Rocket* is by no means the oldest locomotive in the collection.

Agenoria, built by Raistrick, and *Sanspareil* by Hackworth—both built in the same year as *Rocket*. Stephenson's *Locomotion* (1825), and Hedley's



The Great Hall of the National Railway Museum, converted from a former locomotive maintenance depot in 1975 (NRM)



City of Truro, built in 1903 and the oldest locomotive licensed to run on Britain's main lines, during its overhaul in the Museum workshop in 2004. The picture is taken from the public viewing gallery (NRM)



Puffing Billy (1812) are in the National Collection at York, Shildon, Darlington and the Science Museum in London, respectively. The collection also includes working replicas of *Rocket* and *Sanspareil* demonstrated regularly at York and Shildon.

A small number of locomotives from the first days of maturity in the railway industry are to be found, such as *Cornwall*, Francis Trevithick's express locomotive (1846) and *Coppernob*, a Bury bar-framed locomotive of the same year. But the period from the late 1840s to the 1870s is not a strong point of the collection. The novelty of the early railways had worn off by this time and companies were not inspired to preserve their locomotives from this period. It is museums in continental Europe where the best examples of British types from this period are to be found.

After the 1870s, the locomotive collection is strong. Some of these engines remained in operation until the 1930s or even after WWII, and their historic importance ensured their preservation. The 20th century collection is equally strong. The GWR's *City of Truro* (1903) was first preserved in 1933 and has operated regularly since then. Today, it is the oldest locomotive licensed to operate over Network Rail's main lines. In recent years,

its main-line operations have been eclipsed by those of the *Flying Scotsman* (1922), Britain's first successful Pacific type. This locomotive is unique because it was purchased in 2004 for the museum after nearly 40 years in private ownership. Today, as perhaps Britain's most famous locomotive, it forms the flagship of the Museum's collection, exceeding even *Mallard* (1938) in public popularity. *Mallard* still holds the world record of just more than 200 kph for steam locomotives established when the engine was new. In the Museum, it stands beside the Series 0 Bullet Train from Japan, representing the new type of railway that moved the technology forward in the latter years of the 20th century.

The locomotive collections also include a range of British diesel and electric locomotives. Most are from the postwar era of modernization, but some, including a GWR single unit railcar and a diminutive Armstrong Whitworth diesel-electric shunter, represent the first successful diesel applications.

The oldest passenger carriage in the collection is *Queen Adelaide's saloon*—taken out of service and preserved since 1846. *Queen Adelaide* (1792–1849) was an aunt of Queen Victoria (1819–1901) and was the first member of the British royal family to use the train regularly. The

carriage is a gem, its design betraying its ancestry in the era of the horse-drawn carriage and a fitting introduction to the stunning collection of Royal Carriages held by the museum.

Apart from vehicles, the collections include many thousands of artefacts illustrating every facet of the railway story, from bravery medals awarded to locomotive crews for their behaviour in rail accidents, to goods yard cranes, to models of the cross-Channel ferries operated by the railway companies.

The collections include vast amounts of archive material—1.5 million photographs, more than 50,000 engineering drawings, a huge library and more than 7,000 travel posters.

821 items were acquired for the collections in 2004. Some examples help illustrate the immense diversity of the collections:

- A letter, written in early October 1825 by 14-year-old John Backhouse of Darlington to his sister, giving his account of the opening day of the Stockton & Darlington Railway, and including his pencil sketch of the opening train.
- An 1841 letter from Timothy Hackworth to the Chairman of the Liverpool & Manchester Railway, announcing his removal from the

original Stockton & Darlington Railway Works to Shildon, and hoping for locomotive orders

- Original paintings of Berwick Castle by Guy Malet and of Ribbleshead Viaduct by Charles Potter, commissioned by BR's advertising department for railway posters
- Class 47 diesel electric locomotive No. 47798 *Prince William*, donated by the English Welsh & Scottish Railway. The locomotive, one of a 500+ class of second-generation main-line diesels built in 1965, hauled the royal train for over 10 years.

Caring For and Giving Public Access to Collections

The NRM collections are huge and our policy is to maximize the amount of use that is made of them by the public. This means that artefacts should not be locked away, making it difficult for researchers or the interested public to see and enjoy them. Reference material should be available on demand, or at least with very few physical or bureaucratic barriers. While we certainly do not want to see all our railway vehicles in operation, we are keen for people to see a select few in action and we think that visitors should be able to see the others without making special arrangements.

Meeting these aspirations is a challenge, but great progress has been made in recent years. At York, *The Works* displays most of our smaller artefacts. *Locomotion: the NRM at Shildon* was opened in 2004 to bring the last of our vehicles out of storage and into the public domain. Our new *Search Engine* centre for the housing and consultation of archives, photographs and artworks will open in 2007, greatly enhancing our ability to give access to this material. We still need to rise to the challenge of providing web access to more than token quantities of material but *Search Engine*

will give us the facilities to address the mass digitization that this aim implies.

Some of the day-to-day activities of our collections management teams are outlined below.

Housing and documentation

Housing and documenting activities provide the gateway to an accessible collection and the work is never-ending. Our aim is that all our collections should be housed to a good standard so that deterioration is arrested and there is no barrier to easy access to the material. Similarly, we aim for all our collections to be documented to a standard that allows potential users to find out what we have and where it is. This is not a problem for new acquisitions but we have considerable backlogs from the tonnes of engineering drawings and records acquired by the Museum during past closures of railway workshops.

Over the last 10 years, the NRM has progressively improved its premises to house its 'small object' collections, now all fully accessible to the public in *The Warehouse* and, thanks to the opening of the new Museum at Shildon, its vehicle collections. Our primary collections management project today is *Search Engine*, the new £4-million centre currently being developed at York to rehouse all our archive, library photographic and artwork collections. When this work is completed, all of our knowledge collections will be properly housed. The new facilities will also make it possible to make much quicker progress with the cataloguing projects that will deal with the backlogs. Although finding the staff to undertake such activities will always be a challenge, the expanded premises will have much better accommodation for staff and volunteers engaged in cataloguing programmes.

Examples of recently completed cataloguing projects include the completion of a project by volunteers from

The Bluebell Railway to list the Southern Railway locomotive drawings and the upgrading to international standards by museum staff of drawing listings from two of Britain's private locomotive manufacturers, the North British Locomotive Co., and Naysmith Wilson.

Conservation

The second major activity in the field of collections management is the physical care of collections items—their conservation. Our workshops are equipped to conserve vehicles and many non-vehicular items. Recently, in preparation for their display at *Locomotion*, the Southern Railway 2-BIL electric suburban train, two royal train support vehicles, four freight vehicles and the small but historically very significant Armstrong Whitworth diesel-electric locomotive were conserved for display, the latter by volunteers at York.

Paper materials, engineering drawings and photographs for examples, present different problems to the conservator. We use freelancers for this work, a skill with which York is well served as a major archive centre.

Locomotion: the NRM at Shildon

The NRM's most significant development in recent years is an entirely new branch museum. The project—taken forward by a partnership of the NRM and Sedgfield Borough Council—grew from the need to find extra accommodation for the NRM's growing railway vehicle collection. The need for a 6000-m² building capable of accommodating around 60 vehicles was identified because many items in the collection were in open storage, deteriorating and inaccessible to the public. After a nationwide search for a partner, a suitable site was identified adjacent to the Timothy Hackworth Museum at Shildon, the place from where the first public steam passenger train departed at the



Our family activities aim to get even our youngest visitors involved (NRM)



A popular activity for groups of schoolchildren and groups like these Girl Guides, is the 'sleepover', which includes storytelling and activities before sleeping in the museum around the exhibits (NRM)

opening of the Stockton & Darlington Railway in September 1825.

The new museum opened in 2004 and has rapidly established itself as an important addition to the world of railway heritage in north-east England—the birthplace of railways. Along with the new exhibition hall, the new museum includes the home of Timothy Hackworth (1786–1850) and the site of his workshops. Hackworth was one of the pioneers of the steam railway, managing the operation of Stephenson's locomotives and developing important designs in the period 1825–40. To be able to establish the new museum at a site with such historic connections adds a further dimension to the project. Our partnership with Sedgefield means that this site of such importance in the history of railways will be properly marked and the new facility will contribute much to the regeneration of the now quiet country town of Shildon.

Operating Leading International Museum

This function enables us to focus on the business of providing visitors with a rewarding experience and with the support facilities from lavatories to restaurants to miniature railway rides that

they need. At a basic level, we know that visitors have increasingly high expectations of the quality of their visit, that they are volunteers (they don't have to come) and that they need some sort of novelty—something new or different—to encourage them to visit today rather than next year. Perhaps most importantly, we know that more than half our visitors come because they enjoyed a previous visit or because a friend recommended that they should come. This single fact tells us that we have to work very hard to ensure that visitors get a positive experience.

Welcoming visitors

Perhaps the most important aspect of the NRM's relationship with its visitors is the recognition that total reliance on a passive relationship between visitor and object is not sufficient to provide a compelling experience. Such a relationship—an unmediated interaction between individual and object—has its place as part of the experience. Indeed, in art museums, it is typically seen as all that is necessary, but something more is necessary for our visitors.

We aim to ensure that there are specialists—explainers and information centre staff—available to help visitors get

more from their experience. Children can explore some of the basic principles that relate to rail technology in the Interactive Learning Centre and guided tours and demonstrations 'add value' to the basic visit. On busy days, visitors can enjoy drama productions put on by our theatre group, which are a great way of making some of the stories come to life for visitors. Also at holiday times, our education department operates family activities, letting children—and their parents—undertake simple craft exercise to make a model train or paint a mural, for example.

Programmes

In addition to the daily activities in which visitors can participate, a programme of events encourages people to plan a repeat visit. Temporary exhibitions are less common than they were because they are expensive to mount and don't necessarily appeal to a wide audience. Today most of our 3-month exhibitions are of photography or amateur railway art. Some examples from last year give a clue to some programmes that have attracted the public.

At least twice each year, cabs of our locomotives are opened up with volunteer stewards in attendance so that the different interiors can be visited. At least one will

be in operation providing many visitors with the opportunity of a (very slow speed) cab ride. On two more occasions we offer the opportunity to spend a night in the museum to organized groups of children from schools, Girl Guides, etc. They are entertained with activities and storytelling before sleeping among the locomotives and carriages. The event finishes off with some more learning activities and breakfast in the Museum before it opens to the public. It is a never-to-be-forgotten experience for them.

Providing Relevant Programmes and Services

At the NRM, we have worked hard over the last 10 years to broaden our educational role, which we believe is to deliver a diversity of educational 'products' for all our 750,000 or more visitors. For many, it is a very informal educational service, but we are offering specialized services to more segments of our user base.

We aim to provide tailored services for the following specific audiences:

- Pre-school children
- Schoolchildren from ages 5 to 11
- Schoolchildren from ages of 11 to 18
- Vocational training for new and aspiring job entrants
- Academic courses for undergraduates, graduates and postgraduates
- Opportunities for adults involved in informal 'whole-life' learning

School and pre-school services

In the last 2 or 3 years, we have led the way in developing new early years initiatives, engaging a new younger generation of users in museum activities and it is now a strong growth area.

Our traditional education programmes for schools have also developed strongly in recent years to provide a wide range of curriculum activities – not just in the history and technology

fields, which people perhaps expect, but across mathematics and English and the rest of the curriculum so that we can offer relevant activities for the whole school population. More than 50,000 under-16s each year now use our services. In 2004–05, highlights included 56 young people from York special schools performing a piece of music they had composed to celebrate 200 years of railways. Science came to life in March during National Science Week with '*May the force be with you*' an innovative partnership with other local museums to explore forces and friction for primary grade children.

Within this programme we have pushed forward innovative partnerships with the railway industry to bring schoolchildren from the inner city in west, south and east Yorkshire and in Teesside to the museum—some travelling by train and visiting York and a museum for the first time. We've been able to stimulate them with a new approach to the curriculum and, at the same time, provide them with some important induction into the rail safety agenda under the heading of citizenship. It's been win-win-win for us, the railway company, and the children. With partners First Transpennine, 285 children from Leeds, Middlesbrough and Scarborough attended the 2 enjoyable days that included craft activities as well as a session on track safety led by the British Transport Police and Northern Trains. These safety sessions have been developed into an interactive session offered to all schools booking visits to the Museum.

Grant aid from government allowed *Locomotion* to set up a partnership *Transporting Lives* programme with other north-east museums. The aim of the project was 'to promote an understanding and awareness of the changes in transport and the impact these have had on the environment through art and drama.' Five secondary schools were partnered with

five museums; the plan was for the students to be inspired by the collections at the museums to produce a piece of artwork, which would then be displayed in an exhibition that would tour the participating museums.

The institute of railway studies

At the other end of the spectrum, our Institute of Railway and Transport Studies and Transport History 10-year partnership with the University of York provides a world centre of excellence in undergraduate and postgraduate study of transport history for more than 50 students and research associates each year—some exploring further education for the first time, others attracted from overseas to undertake post-doctoral work by the Institute's international reputation. Recent teaching innovations included the Graduate Certificate in Transport History and a specialist undergraduate course in the history of urban transport.

The Institute's wide-ranging conference programme includes the International Early Railways Conference, a triennial meeting of experts on the long history of railways before the advent of long-distance lines.

Informal adult education

We encourage informal education in a number of ways. The Friends of the Museum operate a programme of monthly lectures on railway matters and those who wish to study in a little more depth can undertake a 2-year course for the Certificate of Railway Studies offered by the Institute of Railway Studies and Transport History. From time-to-time we work with agencies that provide informal education services, like the University of the Third Age (U3A), to create education activities. An excellent example was the work undertaken by U3A students to clean and catalogue our collection of hotel and restaurant car silverware. Students gained knowledge of the collections, of catering



Intending passengers welcome *Flying Scotsman* as it arrives at York's station with a train for Scarborough (NRM)

history and of the techniques used in conservation and documentation. At the end of the project they had the satisfaction of seeing a collection that had previously been in store on show in *The Warehouse*.

Vocational training

In May 2004, a new adjunct to the Museum was opened in the shape of the Yorkshire Rail Academy (YRA), a partnership with York's further education college. The YRA has developed its own partnerships with railway companies, such as Network Rail and Grant Rail, to deliver their training programmes. It also provides facilities for schools education, and the team has trained teachers in electronic engineering as well as hosting national training days for science teachers.

Heritage railway training

In 2005, the YRA was awarded a regional training grant to fund a pilot training programme for heritage railways. The pilot is a partnership with a number of heritage railways and local colleges in Yorkshire to develop three training courses for volunteers and staff at heritage railways. The funding comes from the LSC

(Learning and Skills Council) and the training materials will be written by the North York Moors Railway, Keighley and Worth Valley Railway with the support of local colleges. The topics covered in the pilot programme will be basic track safety, customer care and safety in the workshops. This is a pilot project investigating the potential for a broader programme of support for the heritage railway community in the years ahead.

Services for researchers

An important aspect of our education service is the research services that we provide for students and members of the public who wish to explore the collections to assist their own research. The NRM's library has seen increasing use in recent years and can no longer meet the demands upon it. The above-mentioned *Search Engine* project is aimed at vastly improving the quality of service we offer to researchers and at encouraging more new users for these services. Apart from the enhanced housing of the library and archive collections, it will provide new reading and workrooms and a drop-in reference section. These will be located—with suitable

soundproofing—inside the NRM's *Great Hall*, bringing the research centre and general displays together for the first time. Casual visitors will be encouraged to use the drop-in centre to discover more about the exhibits they have seen at the Museum. We hope that by breaking down the boundary between public displays and the 'back-of-house' research centre, we will be successful in encouraging new users to understand the richness of the archive.

Educational Services for Nationwide Audiences

The NRM has a long tradition of working beyond its own walls. Its inheritance of collections housed by museums around the UK has led to a continued practice of maintaining partnerships that bring its collections to a wider audience than can be delivered at the NRM in York.

By using train operations, loans, partnerships and education initiatives, the NRM takes its programmes nationwide. The 2004 opening of *Locomotion* added a completely new dimension to these activities covered elsewhere. This section looks at activities for audiences away from York and Shildon.

Rail operations

Until recently, the NRM made a small number of its locomotives available for operation on main lines and on loan to heritage railways around the UK. Fundraising has allowed locomotives like *Green Arrow* and *City of Truro* to be returned to running order for operations from home base in York.

The overhaul of the GWR 4-4-0 locomotive No. 3440 *City of Truro* was completed in April 2004 in time to haul a privately organized special train to commemorate the centenary of its '100 mph' run in the West Country on 9 May 1904. The locomotive continued its centenary tour with visits to preserved lines throughout the West Country

including operations at the Gloucester & Warwickshire Railway, the West Somerset Railway, *Steam*—the Museum of the Great Western Railway, the Swindon & Cricklade Railway, and at the Didcot Railway Centre.

City of Truro was hired by the Strategic Rail Authority to haul a VIP train between Plymouth and Truro on 1 December 2004 to celebrate the official opening of a new section of double track. This was complemented by the locomotive running five public excursions on the main line in conjunction with tour promoter Vintage Trains.

The acquisition of *Flying Scotsman* in March 2004 brought a change to the NRM's approach to main-line operations. Since *Flying Scotsman* had been operated in heritage ownership after it was bought by its first private owner from BR in 1963, it was unthinkable that it should not do the same in NRM ownership. But it would be important that the Museum controlled the programme and that operating profits were generated to contribute to the locomotive's continued operation. With this in mind, the Museum has set up a trading operation to arrange, promote and operate a programme of steam-hauled rail tours—something it has not done for many years. Over the last two summers, experience has been gained by operating *Flying Scotsman* on the relatively straightforward journey to the seaside resort of Scarborough, 85 km east of York. So far, more than 40,000 passengers have been carried in two summer seasons. With *Flying Scotsman* now temporarily out of service for a major overhaul, a pool of three other locomotives from the collection will be used during the summer of 2006, and new operations, including full day tours along the scenic Settle and Carlisle line will be included, as well as more day trips to Scarborough.

With the increasing gap between the speed and technology of steam

locomotives and today's modern railway equipment, main-line operations become more difficult to organize reliably. Our aim is to base an operation around two or three regular schedules that will be well known and understood by the railway companies and which can form a basis for long-term operation, providing the public with an opportunity to experience the world of steam travel.

Loans

The NRM's collections are so rich that there is more than can be used at York for the public benefit. Therefore, loans play an important part in collections management. More than 2000 objects from the collection are currently on loan to around 82 venues across Britain and to two or three more abroad.

Many loans are made on a long-term (1 year or more) basis, while others are short term, reflecting the temporary exhibition programmes of the borrowing museums. For example, in 2005, 94 objects were lent to the Modern Transportation Museum in Osaka, Japan, for *The World of the British Royal Train* exhibition in

celebration of the 5th anniversary of our sisterhood agreement with them.

In the UK, the core collections of three railway museums at Swindon, Darlington, and Bressingham in Norfolk are composed of long-term loans from the NRM. Each of these museums was set up to house BR-owned material prior to the establishment of the NRM and a close working relationship is maintained with them with occasional exchanges between themselves and York.

Operating partnerships

Partnerships with heritage railways see more than 30 locomotives and other vehicles cared for and demonstrated around the UK. Whilst most of the vehicles on loan are demonstrated only relatively rarely, these loans provide further opportunities for the public to see some NRM vehicles in more regular action. Apart from the locomotives that the NRM itself keeps in running order, several locomotives from the collection are maintained in running order on our behalf by the voluntary groups operating some of Britain's heritage railways. Whilst



The *Flying Scotsman* arrives in York station on one of its summer regular excursions to Scarborough

(NRM)



Young people enjoy refreshments in the display hall of Locomotion, the NRM's new subsidiary museum at Shildon, 100 km north of York. The locomotive is owned by a voluntary preservation society and was visiting Locomotion to provide demonstrations for the public (NRM)

safety standards are just as high, operating speeds on heritage railways are restricted generally to 40 km/h and main-line incab signalling systems are not required, meaning that locomotives other than express passenger types can be seen in action. For example, a partnership with the Bodmin and Wenford Railway has enabled a 2-4-0 Well Tank built by the London and South Western Railway (L&SWR) in 1873 to be restored. It can be seen operating on the line where it finished its working life as late as 1963. Two freight locomotives from the early part of the 20th century—a 2-8-0 from the Great Central Railway, and an 0-8-0 from the London and North Western Railway (L&NWR) have both been returned to steam through partnerships of this type and are to be seen regularly on heritage railways and on occasional visits to York and Shildon.

Work on three more locomotives is progressing, enabling *Green Arrow* to be taken out of service when its current boiler certificate expires. *Oliver Cromwell*, an example of the Britannia Pacific class, the

first type built by BR following nationalization is being restored by volunteers in the Midlands, largely funded by contributions from readers of *Steam Railway* magazine. Similar exercises relating to the Southern Railway locomotives *Lord Nelson* and *Sir Lamiel* are now largely completed and these engines will soon be in service operated jointly by the NRM and the groups that restored them.

A distinctive feature of Britain's railways until nationalization was the London and North Eastern Railway's (L&NER) varnished teak panelled coaches. One from the NRM's collection is on loan to the North Yorkshire Moors Railway where it has joined four others all of which are being restored by a voluntary group. This arrangement has the twin benefits of enabling the specialist skills involved in restoring such vehicles to be shared across several vehicles and, of course, of allowing a complete train to be demonstrated when the work is complete. Similar partnerships elsewhere mean that our collections are both improved in

condition and enjoyed by the maximum number of people.

Progress Through Partnerships

The above sections highlight some of the particular partnerships that bring so much to the Museum. This section looks at the role of two key areas of partnership—with volunteers and with the corporate sector, both of which are important for the Museum's success.

Volunteering

Volunteers make a very significant contribution to the work of the NRM and to the services that it is able to offer to the public. Their involvement is organized in several different ways.

First, around 250 volunteers are directly registered with the Museum and help to deliver museum services. The functions they carry out include manning public information centres in the Museum, helping with guided tours and with special activities for visitors, operating the miniature railway and participating in the team that operates our on-site shuttle train, and joining in conservation and cataloguing activities.

A further group provides support for our train operations, a locomotive support crew helps to prepare, clean and refuel the locomotive when it is operating on the main line. Onboard the train, volunteer stewards in each carriage help passengers enjoy their journey and sell souvenirs.

Some volunteers operate at arm's length from the museum. Several vehicles in the collection are on long-term loan to volunteer groups around the UK, who, in consultation with the NRM, restore and care for them, sometimes including operation on their local heritage railway. Specialist historical research groups help catalogue photographic and engineering collections. In the case of photographs,

this can be done by sending them copy prints of the photographs for identification and captioning, whilst in the case of engineering drawings, groups sometimes have work weeks at York when they come to spend time at the Museum to help on a particular cataloguing project.

Alongside all of this, the 2000-strong Friends of the National Railway Museum is administered and managed by a volunteer board of members. The Friends operate a regular lecture programme at the NRM, in London and, increasingly, at Shildon. Particularly in the south of England, members take NRM publicity to rail-related events and members produce a quarterly journal that is effectively the NRM's journal of record.

Like any museum of its size, the NRM depends on its salaried staff to ensure that its core objectives are delivered. But volunteers add tremendous value to what can be achieved, both in terms of caring for collections and directly helping visitors to get more from their visit. Nor should we forget the personal satisfaction that volunteering brings for the participants. Seeing a restored locomotive or a prize-winning magazine, which would not have materialized without the voluntary contribution of an individual, brings great satisfaction and it is a small but important role of the Museum to provide such opportunities for members of the public.

Corporate involvement

Another aspect of voluntary support for the museum is the corporate partnership programme.

Although the NRM has no formal links with Britain's railway industry, many of the companies making up the industry provide help usually in the context of the Museum's corporate partnership scheme. We aim to build long-term relationships with companies and to seek links that bring benefits to each party. Sometimes, companies make donations towards specific activities at the museum, a public

event or an education programme. At other times, help is in kind—provision of a driving simulator for the public displays in the museum or provision of materials or technical help for a restoration project, for example. Always, we seek to find something we can do in return. Many companies value the corporate hospitality facilities of the Museum or the opportunity to offer a special event for staff members. Corporate partners are recognized within the Museum and encouraged to use the Museum's corporate hospitality facilities. The partnerships that result are good for both parties and we enjoy supportive relationships emerging from this policy.

The Future Market

Experience at York has shown that, in Britain at least, there can be a continuing mass market appeal for a museum devoted to rail. However, visitors undoubtedly want more than the mere display of type specimens of historic locomotives. What visitors do want is less certain. Perhaps too many railway museums still rely on the conventional display of impressive large objects and the NRM is, at least in part, still one of them. It's now 20 years since the California State Railway Museum in Sacramento brought together relatively small numbers of railway vehicles into contextualized dioramas. Although universally admired, the approach has brought few imitators. This year, the well-regarded but essentially conventional railway museum at Utrecht in the Netherlands has been redeveloped

as an immersive attraction with the historic material displayed in a series of 'walk-through' and even 'dark-ride' experiences. First indications are that it is incredibly successful and there will doubtless be lessons for others.

At York, we are beginning to shape a vision for the NRM's displays over the next 20 years. We know that we must get it right if the museum's popularity is to be sustained for a 21st century audience and we will look widely at what is happening elsewhere as we finalize our plans. The challenge before us—and for all other railway museums—is to get the balance right, between impressing our visitors with the awesome giants of locomotive history while engaging them with the fascinating story of rail's role in creating the modern world. ■



Andrew Scott

Mr Scott is Head of National railway Museum at York. He qualified as Chartered Engineer in 1976 and as Curator in 1987. His careers include researcher of Channel Tunnel tunneling techniques, engineer in water industry and curator of Bradford Industrial Museum. He became Director of London Transport Museum until taking present post in 1994. He has published many articles and books on heritage railways and railway museums.