

with an afternoon run to move the engine to Dicot. The engine ran double-headed with N° 4965 *Road Ashton Hall* and we again provided the on-train sales. Our thanks go to Vintage Trains for their permission to be on-board the runs.

On 3rd and 4th July we attended the Train Collectors Exhibition at Sandy Upper School. We enjoyed a prime position in the entrance hall, so most visitors paid us a visit. The weekend proved fairly quiet though, perhaps the competition from the fine weather and national sports events (it was the weekend of the British Grand Prix) proved more attractive.

A week later we were at the Garden Centre at Great Anwell, Ware, Hertfordshire - not to pick up some plants (although some of our number couldn't resist this) but to attend the East Herts Miniature Railway exhibition. The East Herts club operate a large 7 inch gauge railway in the centre's grounds and, for the exhibition they brought in a good number of visiting engines, together with displays of garden railways (LGB scale) and smaller scale (Gauge 1 and below) model railways. The latter were housed in

NEW STOCK ITEMS

The SOE Sales stand has recently been stocked with new items. These include the 2005 NRM "Railway Posters" calendars which, as always, have been selling quickly. Our attendance at Railfest also produced the bonus of signed copies of the ENRM booklets of *Mallard* and *City of Thruo* by their author, Michael Rutherford. The former is the new edition and the latter was only published at the start of this year. There will be opportunities to purchase these at our evening meetings, or at the stand during one of the Outreach events. As a member you are entitled to a 10% discount.

a large marquee, which visitors made use of during the all too frequent downpours. We had our own gazebo, which also attracted potential customers during the storms. Overall, though, the weather didn't seem to put too many people off, with a good turnout and fair sales for us.

The live steam haulage was extremely varied including a model De Winton 0-4-0 VB which drew many admiring glances. It is certainly a show we will consider attending in future, should it be repeated.

Our summer outings ended with the air display at Old Warden on 1st August. This is a fairly regular event for us and normally pulls in a reasonable crowd. It did so this year, but possibly because of the high temperature and humidity, fewer customers than usual seemed to make their way round the stands. The plague of wasps didn't help - we gave thanks that we were not too close to the confectionery stall, which seemed to get more than its fair share of their attention!

The model railway exhibition tours soon start in earnest. Our first is the Farnham & District Model Railway Exhibition in Aldershot on 9th and 10th October.

The Friends also produce a series of Railway Company Crests. These are hand-painted, resin castings mounted on a solid mahogany backing. The series will shortly include the Southern Railway crest and we will be taking stocks for the SOE stand. If you want to reserve a copy, please get in touch with George Rutter (see address on back cover).

FRENCH NATIONAL RAILWAY MUSEUM

As you may know, the French Railway Museum is located at Mulhouse, near the Swiss border, north of Basle. If you were planning a visit you may wish to know that the museum is currently closed for refurbishment.

San Diego was much as I remembered it, but the tram system I did not remember. Los Angeles once had a very extensive suburban light rail system in the Pacific Electric which became a victim of the Los Angeles infatuation with the automobile. However, at Perris a group of enthusiasts have preserved its memory in the Orange Empire Railway Museum. Fashions change and many of the local counties within Los Angeles are supporting a revival of public transport to counter the sprawl of the freeways and their polluting traffic jams.

All too soon we were back on the station at San Juan Capistrano to catch the train north to Los Angeles, and a connection to Train 14, the *Coast Starlight*. Leaving Los Angeles, our route took us through the attractive northern suburbs, eventually emerging from a tunnel into the Simi Valley. This was the setting for filming the Lone Ranger, MY image of the wild west! The train stopped at Santa Barbara and San Luis Obispo for a leg stretch. North of Santa Barbara the railway runs for many miles along low cliffs right on the edge of the Pacific Ocean, with only the sea and the surf as company. After San Luis Obispo it climbs over the Santa Lucia mountains before returning to the coast through the Salinas Valley.

The Oakland station at Jack London Square is new. It was commuter time, so everyone knew where they were going, and where their train would be - except the 2 British tourists feeling rather lost without a large departure board. Eventually the train arrived and we set off one station to Emeryville. On the way we passed the Amtrak yard and there was our next train. Clearly, starting Train 6, the *California Zephyr*, at Emeryville saves backing the train down to Jack London Square. Our route took us first north along the eastern shore of San Francisco

Bay. At this point the bay is so wide that we could have been back on the coast. Approaching Sacramento there was the railway museum alongside the Sacramento river, with the old river boats moored alongside. Soon the train was climbing in the foothills of the Sierra Nevada before stopping at the restored wayside station at Colfax. We had magnificent views over the Sierra Nevada mountain range as the train climbed up the face of the mountains on a ledge, much like the Durango to Silverton line. After the summit of the Donner Pass our route continued down the Truckee river to the gambling city of Reno, Nevada. The railway went down the middle of the town, evidently causing such congestion that work is in hand to build an underpass - for the railway. As we continued the country changed from gushing streams and mountains to desert. By sunset the river had disappeared, to be replaced by a seemingly endless expanse of salt covered mud-flats.

It was soon after dawn when we stopped at Omaha. The station had seen better days, but across the tracks were Union Pacific "Big Boy" 4-8-8-4 #4023 and massive "Centennial" diesel locomotive #6900 plinthed in the station yard. For the rest of the trip we travelled through gently rolling countryside, punctuated by a series of small farming towns. In the usual US manner, the railway went along, or beside, the main street with minimal separation from the road traffic. Osceola was typical where we had to make 2 stops because the rear coaches were out of the station, holding up traffic for nearly 10 minutes. There would appear to be an interest in the railway heritage with many stations restored. At Burlington they had Chicago Burlington & Quincy 4-6-4 #3003 on display.

Phil Brown

SAN DIEGO REVISITED

The talk by Mark Evans on railway station architecture was not the origin of my recent trip to California, but did encourage me to take an interest in the architecture of the many, and varied, stations that we passed through on our nearly 6,000 mile trip.

The trip began and ended in Chicago. The ticket office of the Chicago Union Station is a pleasant 1930's design set in the basement of an office block - no grand railway facade facing the street here.

American practice is to keep passengers in the departure lounge until just before the train departs. Eventually we were called to board through Gate E to enter the stygian depths of Track 22 and Train 303 (the *Ann Rutledge*) for St Louis & Kansas City. Departure was on time and eventually the Gateway Arch hove in sight. Congestion, however, meant that it took some time to reach the station. The Amtrak station is a portacabin as trains no longer use the 1894 St Louis Union Terminal. The impressive waiting room is now the lobby of an hotel built within the train shed, which it shares with shops and eating places. There are plenty of information boards (and a small museum) about this once important midwestern rail travel hub. In the evening we were back at the Amtrak station to board Train 21 - *The Texas Eagle*.

The station at Dallas is very modern. The historic railroad depot at Fort Worth has been preserved, but is currently empty. However, the old goods building contains a number of small sales outlets. The trains now call at the modern "Transportation Center", served by local buses as well as Amtrak and the Trinity Rail Express commuter service covering the Dallas/Fort Worth conurbation. Three days a week coaches off *The Texas Eagle*

are attached at San Antonio to the *Sunset Limited* from Orlando to Los Angeles. However, a freight train had derailed and we were to be bussed to San Antonio, where we would pick up our sleeper. So much for settling down and waking up for breakfast. The bus journey was quicker than the Amtrak schedule and there was the opportunity to look at the outside of San Antonio station whilst we waited for the connecting train.

The scenery had changed. East Texas is green and almost swampy, but now we were crossing the arid plains of west Texas. The countryside is flat with no bridges, except for one or two canyons, and all road crossings are on the level. The train called into the small town of Marfa, and proceeded to block one of the main streets for 25 minutes. By late afternoon we called into El Paso, right on the Mexican border. The station architecture was interesting. I even had time for a quick visit to see the interior - lofty and cool out of the hot late afternoon sun. Next morning we were able to enjoy the scenery as we approached Los Angeles. Pomona station was a riot of colour with bougainvillea. As a far cry from Biggleswade station, our destination station at San Juan Capistrano is surrounded by bougainvillea and jacaranda and palm trees - but has only a single track.

I was keen to visit San Diego. I was there in 1984, and Mark had included it in his world trip, so I wanted to see what had changed. The most obvious change was the increase in passenger rail services along the coast between Los Angeles and San Diego. The through Amtrak trains were now virtually hourly and are supplemented by local services at each end, all in bi-level coaches. The station at

BEAUMONT & TREVITHICK ON TRACK: THE EARLIEST RAILWAY DEVELOPMENTS

Michael Bailey, Past President of Newcomen Society started by reminding us that 2004 marks the bicentenary of Trevithick's first steam locomotive and the 400th anniversary of the first documented railway in the UK. The story begins in 1604, when Beaumont, a Nottinghamshire mine owner, laid strips of wood on the muddy roads at Wallaton Manor, 3m west of Nottingham. We know as he wrote to the landowner explaining the reasons. Archaeological digs in the Durham coalfield found a partly preserved copy. This used oak branches to join timber baulk rails, with double flanged wheels, sliding on axles, compensating for track movement. Both rails and wheels wore quickly, but the wagon carried 1½ tons of coal. Innovations came such as replaceable wooden rail tops, followed by cast iron sections. Cast iron wheels were first used in 1729 but it was 1760 before they were in general use. Coalbrookdale tried cast iron wheels on cast iron rails in 1767 but the rails cracked.

But what of motive power? Newcomen was to first to successfully use steam engines to pump water out of the mines. James Watt improved it by using a separate condenser, avoiding heating and cooling the cylinder. Michael explained that the phrase "19 to the dozen" came from measures of engine performance - 19 bushels of coal for 12 revs. Boulton and Watt patented the design, causing considerable aggravation. Trevithick got round the condenser patent in 1798 by using high pressure (3 bar) steam, exhausting to air. It was also much smaller, and because of the exhaust discharge it was known as a "puffer". He then built a model self-propelled vehicle, leading to his first road vehicle which was

tested on Christmas Day 1801 in Camborne. It exploded 4 days later while the team was in a tavern, but he built another and demonstrated it in London. But there was no demand - the state of the roads made it too slow.

In 1802, William Reynolds, an ironworks owner in Coalbrookdale, considered using one of the puffers on his plateway. We do not know what it looked like and there is no evidence that it was built. In South Wales, a 500 guineas wager was placed that one of Trevithick's engines could haul itself and a train. The engine was finished on 13th February 1804, with the trial set for the 21st. The loco took 4 hours to haul 10 tons of iron, 9 miles to the canal with 60 or more people on board. In more trials it often cracked the rails - this meant relaying the plateway which was too expensive and Trevithick dropped the idea. He pursued other inventions; in 1808 he produced the *Catch Me Who Can*, and ran it near Euston Square, but the engine was still too heavy and ruined the track. He was so depressed he gave up steam locomotives. Meanwhile, Christopher Blackett, a North East mine owner wanted an engine. Trevithick refused, so he turned to William Hedley who designed *Puffing Billy*. It was still too heavy, but this was solved by spreading the weight over more wheels.

George Stephenson then entered, his Killingworth colliery system proved the winning combination. Only 10 years after Trevithick's invention, steam haulage was now practical. Stephenson's tenacity, unlike Trevithick's lack of perseverance, led to the main line railways, illustrated by Michael's final slides of Rocket at the Rainhill trials and the opening of the Liverpool & Manchester Railway.

SUMMER OUTING

On 19th June, fifteen members assembled in the foyer of the *STEAM* museum at Swindon for our summer outing. Unfortunately a few members had been forced to withdraw from the visit due to ill health. At 10.30 we were met by our two guides and commenced the tour. We were introduced to the history of the Great Western Railway's Swindon workshops, one of the "shops" of which the museum now occupies. Some of the dioramas, showing the activities of the workshops, are extremely realistic. The mannequins in the displays are all models of real residents of the town, many being previous employees of the railway. The locomotives and rolling stock are all well displayed and many are accessible, an inspection pit even providing access to the underside of *Caerphilly Castle*. One display which is not normally accessible to the public, because of the need to preserve its original upholstery, is the

GWR diesel railcar No 4. We, however, were taken on a guided tour of its interior, being allowed to inspect the driving cab, main saloon, buffet area and even the toilet. All are in good order. The tour finished with a visit to the seaside - at least a virtual one - as we were transported to the destination of so many travellers in earlier years. This included a display of the delights of the company's hotels and even some "what-the-butler-saw" machines. Following our tour we were encouraged to walk round the museum at our leisure, followed by a visit to the well stocked shop. Lunch was provided in the museum's own restaurant, with an excellent sandwich and fresh fruit collection. The museum is certainly well worth a visit and it is surprising, despite it adjoining the Swindon factory retail outlet, how few other visitors were in attendance while we made our tour. I only hope that they manage to keep their financial heads above water.



The Group admires the pride of *STEAM*

Photo Mel Draper



Our guide and party at Hayes Knoll

In the afternoon we made our way to Blunston to start our tour of the Swindon and Cricklade Railway. We were met by our guide Russell Wear, who started by walking down the line away from the station and towards Swindon, stopping on the bridge over the River Ray (a tributary of the Thames). Here he gave us a brief history of the line and the plans for the future. Unfortunately, because of building on the trackbed, they will be unable to reinstate the line into Swindon, but they do have plans to extend northwards to Cricklade. A few hundred metres away a diesel horn sounded - the signal for us to move towards our special train. Two Mark 1 coaches awaited, with ex-BR Class 03 diesel No D2152 ready to propel the train north to Hayes Knoll. We passed along the track by the storage sidings and through a stretch of open countryside to our destination. This is a completely new station, there being no equivalent when the line was originally in operation. We moved into the capacious shed which adjoins the station. This contains four tracks with a variety of locos and rolling stock undergoing restoration. Russell took us on a tour of the stock and introduced us to some of the volunteers working on the



The end of the line - Hayes Knoll

items. We then walked out of the shed towards the end of the line. The sidings are used to store stock which is awaiting its turn in the restoration sheds. The railway is fortunate that Hayes Knoll is located well away from any habitation and the only access is via the railway. As a consequence, the stock, although kept in the open, is at low risk from the attention of vandals. The signal box is in the process of commissioning, along with the signal installation. This will allow more flexibility during open days. After a good look round, probing all the interesting corners, we rejoined our train and set off for the return trip to Blunston. Here we disembarked just as the skies opened. However, there was no danger of us getting soaked, as our hosts had arranged for the shop and café to be open. The former was well stocked with interesting second-hand books and many of our number went away with bulky bags. The restaurant is housed in two ex-Norwegian Railway coaches and has ample seating. After an enjoyable light meal, we made our way back to the cars for departure. Our thanks go to our hosts at both *STEAM* museum and the Swindon & Cricklade Railway for a very enjoyable day out.