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ROTEBOOK

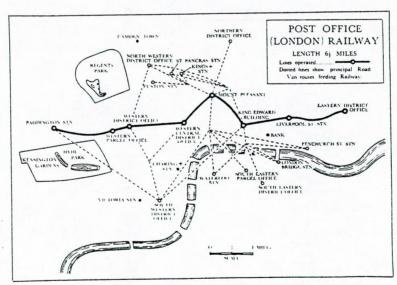
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EDITORIAL

Although my postal history purchases resource activity [known as "work"] continues to interfere too much with more important matters, members will, I trust, be pleased to see a further special edition of Notebook. It is special since it comprises what your Editor found to be a most interesting article in the pages of Stamp Lover, supplemented by a reprint of an old [1948] Post Office publication on the same subject. For those who find the remoter aspects of Post Office operation as being too distant from their immediate collecting interest, apologies — but do sample the very well researched contribution on what goes on beneath your feet when in London.



MAP OF ROUTE

THE POST OFFICE (LONDON) RAILWAY

by Len C. Stanway

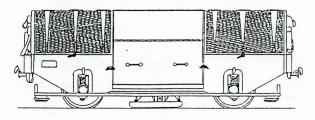
This article is reprinted from *Stamp Lover* of August 1989 with kind permission of the Editor. Every effort has been made to contact Mr Stanway but without success. The opportunity is taken to express appreciation for the unusual aspect of postal history provided by him.

The reproduction of the 1948 GPO publication "The Post Office Railway" is by kind permission of Mail Rail.

By the turn of this century, traffic congestion had reached the point that cross-London by road took so long an unnecessary number of vehicles had to be used to carry the ever growing volume of mails between sorting offices and main line termini. Many spent most of their working day sitting in traffic jams.

Following experience with mail-carrying atmospheric tube railways, a committee was set up by the Postmaster General in 1909 to study the use of pneumatic and electric railways to carry mails. It reported in 1911 and, as a result, the Post Office commissioned a 6.44 mile long, 2ft. gauge underground railway to carry mail between the principal London sorting offices and the termini of the Great Western Railway at Paddington and the Great Eastern railway at Liverpool Street.

Trials with two experimental cars built by English Electric took place on Plumstead Marshes in 1914. They were short 4-wheel vehicles, each having a large load compartment in the centre of the car and two small compartments over the axles.



1914 PROTOTYPE CAR

As early as 1913, a report into the project by R. Elliot-Cooper (President of the Institution of Civil Engineers) and A. Ross (ICE Council Member) criticised the car design and recommended the use of bogie cars. Tests to check their findings were rejected on the grounds that bogies cars would reduce the line's capacity (contrary to later findings).

Mailbags would be loaded individually or in manually lifted trays but no means were originally provided to retain the bags at the outer edges of the mail load floor, other than the compartment covers, which were hinged from the top. The main cover was sheet aluminium, originally in one piece, curved at the top and flat at the side of the car. The smaller compartments over the wheels/motors had expanded metal covers. It was intended to operate trains of up to three cars.

A demonstration to GPO officials took place on the 23rd. September,

1914. The one-piece centre door gave problems and it was agreed it would be modified to be hinged in two panels, a curved one at the top and a flat side panel. Shallow rails were also to be provided to retain the bags at the outer edges of the main load floor. These modifications were probably done by the time a report on the trials was made in November 1914.

The test track was lifted in July 1916. It is understood the cars were transferred to Mount Pleasant for store and eventual use. No records of their use or disposal can be found but test loading of an "experimental wagon", probably one of the prototypes, took place at Mount Pleasant in December 1923.

Construction of the line was authorised by the Post Office (London) Railway Act 1913 and work was started by Mowlem in 1914. However, the First World war intervened and work was suspended from 1918 to 1923.

A rare feature of the railway is the automatic train control, using the centre third rail power supply voltage, which can be set at zero, + 150 Vdc or + 440 Vdc in each section. The Post Office was granted a patent for this system in 1914.

The original stations were at:

Paddington District Office, Padding Station GWR.
Western Parcels Office, Baker Street (closed 1965).
Western District Office, Wimpole Street (closed 1965).
Western Central District Office, High Holborn.
Mount Pleasant Sorting Office, Farringdon Street.
East Central District Office, King Edward Building,
Aldersgate St.
Liverpool Street Station, LNER (GE Section).
Eastern District Office, Whitechapel Road.

A new Western District Office, in Rathbone Place, was opened on the 3rd. August, 1965 on a new deviated section of track to replace Western parcels Office and Old Western District Office.

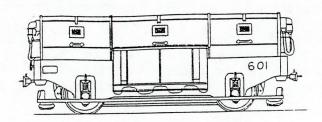
The central car works is situated underground (at basement level) at Mount Pleasant.

The line was eventually opened for parcels traffic on the 5th. December, 1927 between Mount Pleasant and Paddington, after a ceremony at Paddington two days earlier. Mount Pleasant to Liverpool Street opened for Christmas parcels from 19th. to 24th. December, 1927, then for full parcels service from 28th. December. Finally, Liverpool Street to Eastern District Office opened on the 2nd. January, 1928. Letter traffic began on the 13th. February, 1928 with the opening of West Central District Office, followed by Western District Office on the 12th. March, 1928.

1927 Four-wheel Stock

The assumption in 1914 was that ninety cars based on the prototypes would be sufficient to operate the system. Traffic growth then led to a decision to order one hundred cars instead but thiswas reversed in 1916. Hedging their bets, in 1923 the Post Office opted to invite tenders for ninety or one hundred cars. English Electric and Metropolitan-Vickers would appear to have been the main [or only?] contenders, as they alone are shown in the surviving Post Office records. The production order went to English Electric in October 1924 for delivery commencing in 1925. The cars

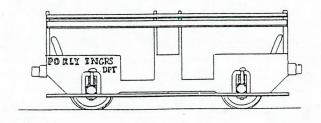
were numbered 591 to 680. It is said the bodywork for the cars was subcontracted to tram builders Kilmarnock Engineering Co.



PRODUCTION 1927 CAR

Before the production order for rolling stock was placed, it is possible a pre-production three car train was ordered for delivery in 1924. Three cars certainly were supplied by English Electric as its works numbers 575 to 578 of 1924. Unfortunately, neither GEC (successors to English Electric) not the Post Office Archives are able to furnish further details. It is probable they were the unpowered permanent way vehicles which, appearing in some of the earliest photographs, still exist today and are described later.

The 1927 stock differed from the prototypes in some significant respects. The magnetic track brakes, used extensively on tramways were replaced by tread (clasp) brakes more common in railway practice. Hook couplings were replaced by a link and pin type. The cars were painted battleship grey.



1924? PERSONNEL CARRIER
(1928 CONDITION)

At the top, covers were curved sliding sheet aluminum. so as to reduce the risk of damage if left open when a car was despatched. They were to give major problems in service once they inevitably became buckled. Indeed, as early as November 1925, when the first car arrived, expenditure was authorised for the fitment of one car with roller shutters. This trial must have proved unsatisfactory, as all cars were delivered with sliding covers.

It was decided, as late as August 1926, mailbags were to be loaded in containers having their own wheels, in order to speed loading and unloading at stations. The lower panel of the main compartment was altered to hinge down to form a ramp up which a large container could be pushed. The smaller side compartments were to take containers with folding legs and were open at the sides to allow these to protrude. The small containers were ordered from Goodyear & Sons in August 1926. However, modifications to the design were still being requested as late as January

1927, less than eleven months before opening! The centre containers were ordered from J & F Howard of Bedford in October 1926.

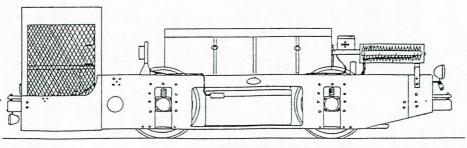
Three car trains were the norm but, later, Christmas 1930 saw the operation of four car trains, made possible by the growing number of 1930 Stock cars available to spread the load and maintain service frequency.

Despite the precaution of obtaining prototypes, this original stock proved unsatisfactory in service, as foreseen in the 1913 report. Problems included rail and wheel wear (leading to signalling and motor insulation failure) and frequent mechanical failures, notably broken wheels with bent or broken axles. All wheels were replaced during 1928 by ones having wider tyres. The current collection shoes were found to be too narrow to cope with bends: the whole fleet had to be re-equipped with wider shoes.

Attempts to remedy the faults proved unsuccessful and total replacement was the only viable remedy. After trails with two prototypes, the 1927 Stock was replaced by the 1930 Stock. Initially, it was planned to retain forty cars as an emergency reserve; by the 16th. August, 1929, lack of space reduced this proposal to 16.

The 1927 Stock, however, was to have a last fling. The 1930 Stock proved highly prone to derailments. Despite many modifications, the problems reached the point that the delivery of 1930 Stock was suspended pending investigations. A survey of available stock on the 15th. October, 1930 revealed, of the ninety cars in the original fleet, sixty were available for service if required, ten were sufficiently intact to be reassembled for service and this was in progress; about twenty had been cut up or were beyond revival. Twentyone trains of the 1927 Stock, now regarded as proven [!] could thus be provided but some six 1930 Stock would still be needed. By April 1931, reliable running of the 1930 Stock had at last been achieved and all 1927 Stock was withdrawn with effect from the 1st. June, 1931. Disposal of the cars held in reserve was agreed on the 19th. August, 1931.

1926 Battery Locomotives



1926 BATTERY LOCOMOTIVE

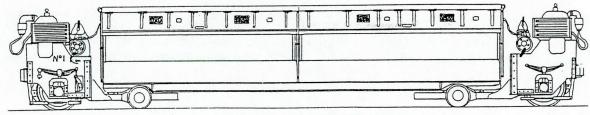
Four-wheeled battery electric locomotives (numbered 1-3) were built in 1926 by English Electric, to power works and maintenance trains and are very similar to locomotives used for work in mines, etc. All three are still very much in active service. A proposal was made in 1936 to purchase two or three more but the necessary finance was not forthcoming. A blank record card exists for a fourth locomotive but there is no evidence it ever existed.

1929 Experimental Cars

By 1928 it was realised the only solution to the problems of unreliability, high maintenance costs and overloading was to re-equip with bogie cars, which would reduce wear and stress on the cars and the track and which would also increase the line's carrying capacity.

In April 1928, an internal report recommended two prototypes of new cars be purchased for tests. This was reviewed by senior management and tests with one car were authorised. English Electric was approached and they offered to supply two prototypes at their initial expense, the final arrangements for payment depending on the eventual outcome regarding production orders. This offer was taken up.

The two prototypes, for which no works numbers or order numbers have been found, differed considerably in design concept. The first of the two cars, known as the "Maximum Traction Car", shown in photographs as "No.1", consisted of two four-wheel power units, with large driven wheels, the resistors etc., mounted above them. There were very small trailing wheels carrying a king pin, which supported a rigid body capable of carrying four large containers. The body was still enclosed, as on the 1927 Stock. The height of the lower side panel (ramp) was reduced, while the top cover reverted to a hinged type due to the jamming problems experienced with the 1927 Stock.



1929 MAXIMUM TRACTION PROTOTYPE

The second, the "Articulated Wagon", had a central articulation bogie on which two load carrying bodies rested. No more detailed description is possible. No photographs or drawings of the articulated car appear to exist in the Post office Archives. GEC has no record of either car!

In November 1928, a "template wagon" was used to gauge the track and clearances for these larger vehicles. In january 1929, the Maximum traction car was received. Running trails began in February 1929. The Articulated wagon was delivered in March 1929 and trials of this including, it would appear, some with the two cars coupled together, commenced in April.

The Articulated Wagon proved abortive as, amongst other things, the suspension of the central bogie gave pronounced variation in floor level as containers were loaded and unloaded, leading to problems with the loading ramps. The official reasons for rejecting the articulated wagon were given as:

- The maximum traction car had only one load section to deal with, as against two in the articulated wagon.

- The maximum traction car could be parked with one end driving unit in tunnel. saving platform space.

- The maximum traction car was marginally faster in service.

- A train of maximum traction cars could run with one out of 4 drive units disabled. the articulated wagon would be stopped.

- Maintenance was easier with the maximum traction car.

On the other hand, the maximum traction car was considered too heavy and extensive use of aluminium in production units was considered. However, it was the better of the two cars and thus formed the basis of all subsequent stocks to date.

It was found to consume more current than a single 1927 Stock car but could replace a three-car train with platform capacity to spare! An early benefit found was the ability to run for 2,800 miles without brake adjustment compared with 400 miles for 1927 Stock. Alone, therefore, it entered commercial service on the 15th. July, 1929.

The continuing problem with jamming top covers on the 1927 Stock and the forecast cost of proving covers on the new stock led to a proposalthe new stock should not have top covers but, instead of the containers, which could be withdrawn and repaired without reducing train availability, would bear a simple canvas cover. It was, therefore, proposed in November 1929 to remove the top covers from the maximum Traction Cars for trials. It is assumed these were undertaken and proved successful.

The Post Office, therefore, decided to re-equip the line with production units of the Maximum traction type without top covers. English Electric wanted the Post office to order fifty cars there and then, in which case they would write off the cost of both experimental cars, estimated at £1,628. the Post office, understandably, cautious and was prepared to order only twelve, with an option for thirty eight more. English Electric agreed to write off the cost of the Articulated Wagon if the option was taken up within one month of the first delivery. This was accepted and the 1930 Stock contract included a payment of £811 for the maximum Traction Car (almost double the cost of a production car !) The articulated wagon was returned to English Electric.

The maximum traction Car was, for a number of reasons, deemed incompatible with production bogie cars but this did not matter initially as single car operation was the norm. It had a habit of overrunning braking sections, which to at least one serious collision in 1929. Nevertheless, it achieved some 25,000 miles service in its eighteen months of duty. It was withdrawn in May 1930, with a burnt out resistor, and was set aside. Due to the problems with early deliveries, it was decided to repair it, including repairs to the trailing wheels by building up the tyres with weld. This latter was probably its final undoing as, when it re-entered service on the 1st.

October, 1930, it ran only one hundred and eighteen miles, with eighteen derailments, which may have been caused by buckling of the wheels during welding! The last accident incurred major damage and the car was finally set aside.

This, however, is not the end of the story. The Maximum Traction car was stored from 1931 until the mid-1960's, probably in a disused tunnel. For the 1967 40th. Anniversary celebrations it was decided to build an eighteen seat passenger car to carry VIPs around the system behind a battery locomotive. The 1929 car was taken out of store, demotored and fitted with "engine" cowls similar to those of the 1962 Prototype. The covers were removed from the body, a perspex roof and side doors fitted. The ensemble monograms of King George V, King Edward VIII, King George VI and Queen Elizabeth II appeared on the car doors. After the celebrations it was again stored. In preparation for the 1977 celebrations, the bogie units were replaced by those from 753, a 1930 Stock car but, as far as can be determined, the body remains in service to this day!

1930 Bogie Stock

Purchase of these cars was authorised on the 15th. August, 1929 to replace the original four-wheel stock. As mentioned already, twelve cars, based on the Maximum Traction Car design, would initially be delivered and, if they proved satisfactory, a further order for thirty eight would be placed within a month of the first delivery.

The cars were designed to run in two-car trains. Unlike the prototype, closed containers were carried on an open platform, the decision having been taken in 1929 to use simple canvas covers on the containers instead. The motors and wheelsets from the 1927 Stock were overhauled and reused in the new stock. The first batch (752-763) were delivered in April and May 1930. The first two entered service as single cars on the 17th. May, 1930 and all were in service by mid July. the first two-car train was run on the 9th. September, 1930.

The new cars were over-length and over-weight and a long argument between the Post office and English Electric ensued. The two parties eventually put the problems down to misunderstandings and specification changes, as getting the cars into reliable service took priority.

Initially, riding was bad with a number of derailments, the first only six days in service, due to light loading of the trail wheels. The Batch 1 units had their king pins position changed several times to try and overcome these riding problems. By the 17th. July, when twelve derailments had occurred, modifications had been made to all the Batch 1 units by fitting new king pin mounting plates to provide improved weight distribution: this at the expense of making the car six inches longer. For a while, the problem was seemingly cured but, on the 8th. August, restarted, with a further dozen derailments by the 22nd. This time it was the king pin cotters on the articulation fouling their seats due the bad track layout (required by the 1927 Stock) at Eastern District Office in particular. The cotters were modified and this source of the problems Other derailments, at Mount Pleasant, were put down to eliminated. excessive speed on a crossing and track modifications overcame this. Problems were only resolved when all the 1927 Stock had been withdrawn and the track extensively repaired and layouts revised to improve ride.

Delivery of the Batch 2 units (793-803) began in September 1930. Visually they differed from Batch 1 units in the design of the structure supporting the resistance bank. The Batch 2 units incorporated modifications based on experience gained from the Batch 1 units, notably relocated king pins on both power units and body to provide improved weight distribution without overall length penalty. The bodies of the batch 1

units were to be modified at a later date in the interests of standardisation but it not known if any work was done on this as derailments resumed on the 5th. September. There were nineteen that month, plus twentyseven at no less than twentythree different locations in the first thirteen days of October. At this point, deliveries of Batch 2 were stopped after the first eight cars, pending an investigation of the cause. English Electric suggested alterations to the trailing wheel flanges and gauge centres and reduced speed.

In the meantime, maximum use had to be made of the 1927 Stock, including reassembly of some partially dismantled withdrawn units. nevertheless, six 1930 Stock cars had to be kept in service during the crisis to meet traffic needs.

Not all the containers had yet received top covers, resulting in an accident on the 15th. November, 1930, caused when a mail bag fell out of an uncovered container on a 1930 Stock train.

One measure tried was to install a check rail at some trailing points but by the 26th. November suspicion had fallen on pivot stiffness, with yet another change to the king pin location. Six cars were modified.

On the 1st. February, 1931, four had their king pins returned to their original locations for trials with a heavier body and all of Batch 1 were so modified in March 1931. A report on the 26th. March indicated all the remaining problems were due to the need to run old cars, with consequent effect on track and power supplies, plus known faults on individual cars. Delivery of Batch 2 resumed in April 1931 and completed by July of that year.

The last 1927 Stock was withdrawn when enough new cars were available to handle the service. All the derailments quoted in a June 1931 report were due to identified individual faults. These included a frame failure, which had led to the strengthening of the frame around the trailing axle. Modifications to the cars were in hand and track alterations to solve the remaining problems were under study. A report of the 25th. September claimed no derailments.

The frames of the 1930 Stock proved inadequate. A contract with the Steel Barrel Company was placed in June 1934 to have the power unit frames of all fifty cars repaired and reinforced with steel plates. However, this was only temporally successful and all power unit frames were replaced in 1939 - 1940 with stronger ones supplied by English Electric to the 1936 design (see below).

The 1930 Stock provided the bulk of the daily service for almost fifty years and most cars remained in service when the first 1980 Stock cars entered traffic. A number were subsequently refurbished to operate alongside the 1980 Stock and remain in active service at the time of writing. Few have been disposed of and most of those out of service are stored in disused tunnels. Cars are periodically rescued for further service to replace failed units or, more recently, to meet traffic growth. Since 1986, those in service have been repainted red to match the 1980 Stock.

During 1989, 801 was given a heavy overhaul and its body replaced by that from 810, which had been heavily rebuilt with its ramp mechanism working in the same was as the 1980 Stock.

1936 Bogie Stock

Parcel post rates were substantially reduced from the 1st. July, 1935, leading to a major increase in parcels traffic. Indeed, parcel postings in the London area rose by 11% in the first six months of the new rates compared with only 4% for letter post. the existing stock on the railway were increasingly hard pressed to cope with the additional traffic and a nett growth in 10% in railway traffic removed the vital maintenance float.

As a result, a batch of ten cars was ordered in 1936 from English Electric (923-932) to cater for this increased traffic. These were similar to the 1930 Batch 2 Stock but with frames strengthened to overcome the known deficiency.

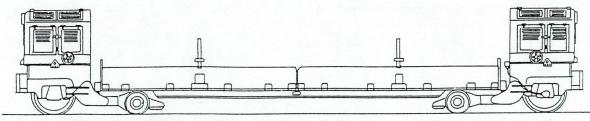
With the 1930 Stock this provided the daily service until replaced by the Greenbat Stock from 1980 onwards. Repainting in red livery of the surviving cars commenced in 1986. Three are available for service at the time of writing.

The railway formally adopted the title "Post Office Railway", long used colloquially, in 1952 as a result of an employee suggestion scheme submission. The notice appeared in the Post Office Circular of the 3rd. September, 1952 but existing stationery and rubber stamps were to remain in use until routing replacement took place.

1962 Prototype Stock

To enable trials of features under consideration for inclusion in a new stock to replace the 1930 and 1936 Stocks, the Post Office ordered two new cars [1-2] in 1962 from English Electric.

They had an improved appearance with enclosed resistances [which initially led to overheating problems], a new type of loading ramp, rubber suspension, disc brakes and were lighter, giving a better performance. The rubber suspension was replaced in 1968 by coil springs, whilst the disc brakes gave way to standard clasp brakes in 1970.



1962 PROTOTYPE

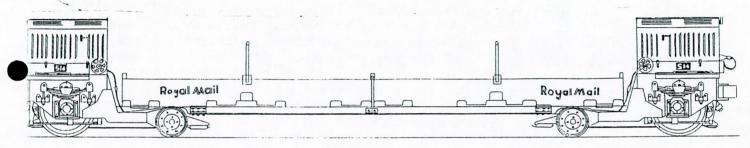
It was intended the proposed thirty trains [costing half a million at 1964 prices] should be able to operate in three-car trains to increase line capacity [traffic reached its peak in 1962] but this was abandoned due to the civil engineering costs associated with extending platforms, etc.

Service trials were undertaken from 1964 to 1976. In service they proved unsuccessful and accident prone, culminating in an accident which effectively wrote off one of the cars. The best parts of both cars were later rebuilt into one car, initially numbered 2.

Further proposals in 1973 for a production batch came to nought but the influence of this stock can be seen in the design of the Greenbat stock which materialised in 1980. The hybrid unit 2 was withdrawn from service in May 1980, after only spasmodic use but returned to service on 16th. June. 1986, after being renumbered 66. It is now in regular use.

1980 Greenbat Stock

After much delay, re-equipment and modernisation of the Post Office Railway was finally approved in the late 1970's. Thirty-four cars [501-534] were ordered from Greenbat [Engineering] Ltd. of Leeds for delivery between September 1979 and September 1980, to replace life expired cars plus the remaining 1962 Stock car. Unfortunately, Greenbat went into receivership in April 1980 and the works closed on 9th. May, 1980, after only 501-503 had been delivered.



1980 GREENBAT CAR

The locomotive side of the business was taken over by Hunslet Holdings Ltd. and reopened the next day, building locomotives with Greenbat as a Hunslet trademark. Hunslet renegotiated the Post Office contract and new orders were placed for the remaining thirty one cars and an additional pair of spare power units. Nevertheless, a considerable delay occurred before delivery recommenced. All the 1980 Stock cars originally carried cast plates on their front panels bearing the Greenbat name. On the "genuine" Greenbat cars the lettering is black on a white plate. The cars delivered by Hunslet have white letters on a black plate. It has been suggested they are in mourning for the old company!

These cars now provide the principal service with a number of overhauled 1930/6 cars. The power units start a new number series from 101 and 102 [car 501] onwards. The cargo carrying bodies bear numbers 401-434 respectively in order of fleet number. Each of the two spare power units [169 and 170] are regularly substituted for other units which are out of traffic for repair or rectification, to enable the affected car to be returned to traffic without delay. When repaired, the displaced unit may sometimes bear 535 temporarily whilst in store in the depot rending return to its original car. One one occasion, 169 and 170 were both in use in the same [502] unit!

One car, used on the non-stop Liverpool Street to Paddington express working, received a nameplate "Great West Express"in 1986, in place of its Greenbat plate. Others have since been named, including "Great East Express" for the return journey.

The original steel cowls around the resistance proved dirt prone and difficult to keep presentable. In 1987, the line's Diamond Jubilee year, three cars were rebodied with glass fibre cowlings designed by Hop Studios, built and fitted by POR staff, giving a more modern appearance and hopefully easier to keep clean. Their public debut was made at a ceremony,

at which one was "launched" by Sir Bryan Nicholson, Chairman and Chief executive of the Post office on the 23rd. October, 1987 to celebrate the 60th. Anniversary of the railway. Of the three conversions, 514 was names "Capital Express", 532"The London Flyer" [with nameplates on both sides of the top of each cowl]. The third was unnamed.

These conversions ,initially, were considered too close to the limits of the structure gauge, with the risk a spring suspension failure might lead to a collision with the tunnel lining. The cowl of one car was dismantled in may 1988 but the other two entered regular service later. A new design, crafted from brown aluminium, was proposed but this is likely to be applied to all cars in the foreseeable future.

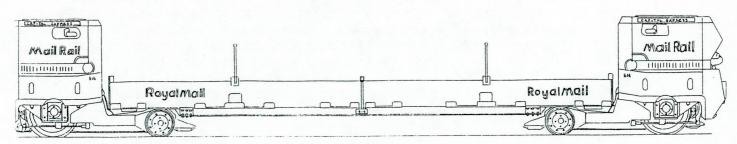
New Proposals

After falling in the 1970's, traffic began to grow again in the mid 1980's. Thus, a number of extensions to the Post Office Railway were again considered, including a long extension to Heathrow Airport but the impetus for new proposals followed the reorganisation of British Rail services in 1986. Two promising schemes were an extension from Paddington to Kensington (Olympia) to serve north-south trains by-passing London, introduced by BR with the May 1986 timetable and a branch from Mount Pleasant to a new proposed Post Office facility at Farringdon or on the former Snow Hill station site, to serve trains crossing London via the Snow Hill Thames Link.

The last mentioned was under serious consideration but British Rail could not provide enough rail service connections to justify the investment.

Under New Management

The opening of a central parcels distribution centre at Brent Cross removed parcels traffic from the line but this was compensated for by a rise in letter traffic. During the splitting of the Post Office Corporation into separate wholly owned "businesses" in 1987, the Post Office Railway passed to the London Letters division of Post Office Letters Ltd., as part of London Central Transport. In the new "go-ahead" climate, the POR took the new title "Mail rail".



1987 REBODIED CAR

At the same time the stations were renamed becoming :

Paddington Letter Office, Paddington Station, British Rail.
Western London Letter Office, Rathbone Place.
West Central Letter Office, High Holborn.
Mount Pleasant Letter Office, Farringdon Street.
East central Letter Office, King Edward Building, Aldersgate St.

Liverpool Street Station, British Rail. North East Letter Office, Whitechapel Road.

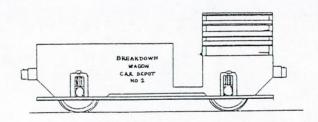
Miscellaneous Stock

Finally, we must examine the miscellaneous stock all railways possess but which tends to be neglected by enthusiasts in favour of the more glamourous revenue earning vehicles. These cars are normally only in the depot or operated with battery locos.

4-Wheel Breakdown Cars

Often stated to be converted from 1927 Stock by removal of motors and fitment of large tool carrying bodies, these were probably purpose built from new by 1928, by English Electric as their works numbers 576 to 578. One is shown in a 1928 view of the car depot when all the 1927 Stock would have been needed for service. They originally carried the fleetname PO RLY ENGRS DPT without a number. Close examination of breakdown car number 2 reveals its chassis design is not of a 1927 Stock car but, in outline, resembles that of the 1914 prototype cars. It is essentially a toolbox on wheels, with ability to carry one person if necessary. Its brakes consist only of a handbrake wheel on one end. Number 2 currently has one plain axle and one carrying a pinion, probably exchanged with a 1927 car at some time.

The cars are based at Mount Pleasant, paddington and Liverpool Street with the battery locomotives and are numbered thus:



1924? BREAKDOWN WAGON (1983 CONDITION)

BREAKDOWN NO. 1 BREAKDOWN WAGON CAR DEPOT NO. 2 BREAKDOWN NO. 3

4-Wheel Personnel Carrier

This was recorded in the early years of the line but has now been disposed of. Also often stated to be converted from 1927 Stock, it was probably purpose built from new, as it too appears in the 1928 view of the car depot. Originally, it carried fleetname PO RLY ENGRS DPT, as on the breakdown cars, which it closely resembled. It is said to have been scrapped in the 1960's but may well have been one of English Electric 576 to 578 referred to above and now is one of the three breakdown cars, as the third has been recorded only in recent years.

Bogie Personnel Carriers

As mentioned previously, the Maximum Traction car was stored from

1931 until the mid 1960's, probably in a disused tunnel. For the 1967 Anniversary celebrations, it was decided to build an unpowered passenger car to carry VIPs around the system. This would be towed behind a battery locomotive. The 1929 car was taken out of store, demotored and the resistance banks of each unit replaced by a louvred cowling resembling that of a 1962 Prototype car. A perspex roof was fitted, with 18 tip-up seats and side doors. The ensemble was painted in an attractive livery of black with red red cowls carrying the royal monograms since 1927 on the car doors.

In preparation for the 1977 celebrations, the bogie units were replaced by power units 103 and 104 from 753, a 1930 Stock car but, as far as can be determined, the body remained that of the 1929 car. The bogies bear no visible means of positive identification. Fluorescent saloon lighting was fitted in 1989. handbrakes are operated from a pair of handwheels mounted on the inner end of one unit so as to be operable from the passenger compartment.

A further car was converted on the 22nd. January, 1976 with a wire mesh roof for permanent was staff. This is also unpowered and operates with a battery locomotive. Its still bears its power unit number plates 239 and 240, proving it to have been car 821. There are eight seats on benches of two, one transversely at each end and a longitudinal bench to the right of the central doorway on each side. the resistance banks are each replaced by a streamlined cowling with a central headlamp.

Other miscellaneous stock still in use includes:

4-wheel trolly without couplings, used for permanent way work and carriage of heavy items within the depot. Present by 1928. Also used as an accommodation bogie.

Bogie rail carrier, converted c. 1984 to carry a cable drum on a shorter body.

Bogie open wagon with hinged sides.

4-wheel Vacuum cleaner for running tunnels. Built 1965 by Electric Power Engineering Co.

Preserved Cars

A 1927 Stock car, said to be 601, was reconstructed on an old chasis, with replica bodywork and containers, but unpowered, in 1967 for the 40th. Anniversary celebrations. At the time of writing this is stored in Mount Pleasant Depot. The appearance of this car coincides with the disappearance of the 4-wheel personnel carrier but examination appears to confirm this is based on an actual 1927 Stock car chassis. It is painted in green livery, whereas battleship grey was the normal livery for this stock.

Other cars of 1930 Stock are preserved by outside museums:

803 to Buckinghamshire Railway Museum, Quainton Road, 26th. march, 1983.

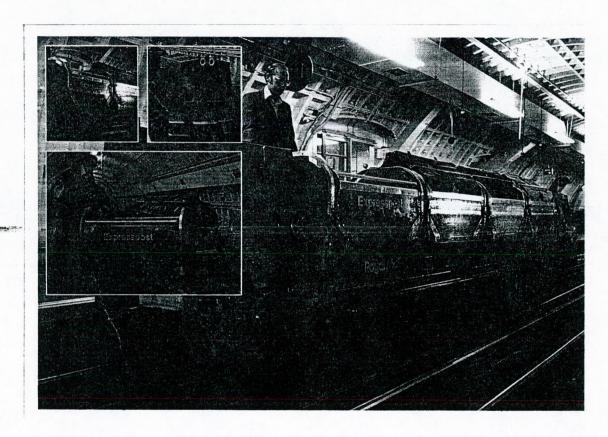
807 to Science Museum Annexe, Wroughton Airfield, Wilts, 30th. January, 1986.

808 to Diesel and Electric Company. Minehead, 26th. July, 1982 809 to National Railway Museum, York, 7th. April, 1981.

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Members may be interested to learn that visits to see the operation of the underground railway can be organised. These have to be during the usual working hours but it is hoped to arrange an LPHG visit later in the year.

We tried to get a copy to go with this issue of the current map illustrating "Mail Rail" but this was not possible.



The Post Office Underground Railway at Mount Pleasant Sorting Office

No 2 of a series of 6 cards. printed at The House of Questa London.