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The 'Warships'

The UK's Number One Modern Traction Partwork

Modern LOCOMOTIVES ILLUSTRATED

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Above: Swindon-built 'Warship' No. D805 Benbow stands adjacent to the island platform at Taunton station on 16 June 1959 with the down 'Royal Duchy' from Paddington to Penzance. This loco entered traffic just one month earlier on 13 May 1959.

K. L. Cook / Rail Archive Stephenson

Cover (main): With Hungerford station in the background, North British Locomotives A1A-A1A 'Warship' No. D603 Conquest heads 'up' the Berks & Hants main line on 4 July 1959 with a West of England to Paddington express.

R. C. Riley

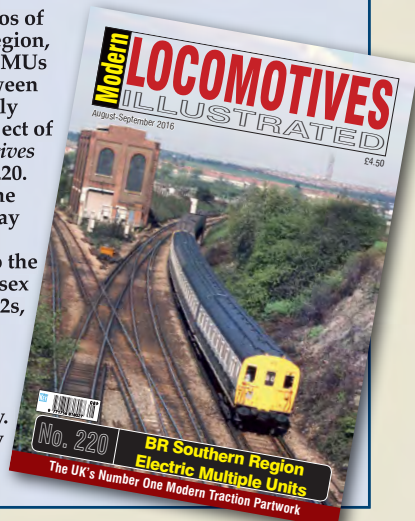
Cover (Inset): No. D842 Royal Oak, displaying 1960s Western Region maroon livery, with a later applied full yellow warning end. The loco is seen at Gloucester Horton Road depot on 13 April 1970.

Norman E. Preedy

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The 'Warships'

Without any doubt, some of the most followed classes of modern traction locomotives have been the three builds of diesel-hydraulic locomotives, collectively known as the 'Warships', a title given to the fleets as each member was named after a Royal Navy battleship.

When the mid-1950s British Transport Commission (BTC) Modernisation Plan emerged, the Board of the then Western Region opted to experiment with a small fleet of diesel-hydraulic locomotives. For main line duties these were dual-engine locomotives ordered from the North British Loco Co of Glasgow. This order for five locos became the D600 fleet.

Soon, the Modernisation Plan was furthered and mass orders placed for new diesel and electric locos. Again the Western Region opted for the diesel-hydraulic type. This time adopting a scaled-down version of the German V200 design.

Orders for what became known as the 'production' or D800 'Warships' was awarded to both the BR Works at Swindon and the North British Loco Co of Glasgow. The Swindon locos incorporated a Maybach/Mekydro engine and transmission, while the NBL batch incorporated a NBL/MAN and Voith power and transmission system.

Allocated to Plymouth Laira and later other West of England sheds, the 'Warships' paved the way for modernisation until the more powerful 'Western' diesel-hydraulic fleet arrived in the early 1960s.

The 'Warship' fleets, classified under TOPS as 41, 42 and 43 stayed mainly on the Western Region. The D600s were soon ousted from main line duties relegated to Cornish and local duties, being withdrawn at the end of 1967 after less than 10 years service. The D800 breeds were also doomed after mass introduction of diesel-electric fleets, and the Class 42 and 43s passed into railway history by late 1972.

Sit back and enjoy this edition of *MLI* covering some of the most glamorous designs of UK modern traction.

Colin J. Marsden
Editor

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The North British D600s

As part of the 1955 British Transport Commission Modernisation Plan, the Government gave approval for considerable expenditure on the replacement of steam traction with modern diesel and electric types.

The BTC favoured electrification for main routes and fleets of diesel-electric locomotives for 'secondary' lines, the locos would be divided into various power brackets to suit each operating sphere. However, on the Western Region other ideas were in the pipeline, that of developing the diesel-hydraulic design, and the regional board sought permission to devote a major portion of 'their' modernisation budget to the acquisition of diesel-hydraulic traction. Therefore, even at this early stage, railway standardisation would be defeated, which the first Chairman of the BTC, Sir Brian Robertson felt was 'one of the most important and prime aims of the new railway'.

With Western Region insistence on proceeding with diesel-hydraulic designs, there were a number of major stumbling-blocks to conquer; the first, and by far the most significant, was that virtually all previous experience with hydraulic transmissions for main line locos, and indeed the sole builders of such equipment, was Germany. As only a decade had elapsed since the end of World War 2 it was felt politically embarrassing to place large industrial orders directly with German manufacturers.

Thankfully, there was one UK manufacturer, the North British Locomotive Company of Glasgow (NBL), who had for some years produced lower powered industrial diesel hydraulic locos. Based in Springburn, Glasgow, NBL held a Voith licence to manufacture transmissions which it was awarded in 1937, together with a MAN engine licence dating from 1954. With a UK builder able to fulfil the BTC/WR diesel hydraulic need a pilot order was placed with the company in 1955 for five locomotives, later to become the D600s; the quoted cost per loco was £86,000, this rose to £87,500 before delivery.

In the summer of 1955, the WR hydraulic plans moved forward when the BTC and the German firm of Maybach Motorenban, Krauss-

Maffei (KM) and the engineering department of Deutsche Bundesbahn (DB), held a number of meetings on the practicability of main line diesel hydraulic locomotives for the UK. This culminated in the BTC being given assurance that an English version of the German V200, twin-engined 2,000hp loco design was quite practical. However, prestige and political pressure still prevented the BTC from purchasing complete traction units from Germany.

Five D600s were ordered from the North British Locomotive Co on 16 November 1955 as BTC contract PRE/A/725/2 against NBL contract L76, for delivery in approximately 15-20 months. These would act as a direct comparison to the English Electric Type 4 D200 (later Class 40) build.

The bogies were of the A1A-A1A type, having the outer axles powered, and the centre set as an 'idler'. The design allowed for a maximum 20-ton axle loading, with the un-powered set carrying 19 tons. This power/idle/power arrangement was adopted as no suitable three-axle drive unit was available at the time. The main mechanical portion of the locomotives comprised riveted/welded I-sections and cross-stretchers, together with cast drag boxes and a thick steel frame/floor; the superstructure was formed of aluminium sections and plates, while the driving cabs were formed of Alpac castings, welded together.

The interior of the nose and cab section was lined with glass fibre for insulation and sound proofing. In the centre of the nose end were two alloy hinged doors, installed to allow crew to move between locos when operating together, however this facility was seldom used.

Train identification was provided by steam-style disc/light equipment, supplemented by a three-section stencil frame to carry a reporting number. The section between the full width cabs was almost symmetrical with, towards the middle a Spanner Mk I steam heating boiler, adjacent, (heading both ways) was a dynastarter, power unit, transmission block and cab bulkhead. In the roof above the transmission units were cooling fans, controlled by thermostatically activated motors; the radiator

blocks, set deep into the body sides had their own compartments.

The engines adopted for the D600 breed were two MAN L12V 18/21S type units, each set to deliver 1,000hp (745.5kW) at 1,445rpm. The power units installed in the first two examples (D600-D601) came from the MAN works at Augsburg, Germany, while those in the final three locos were assembled under licence at NBL Glasgow. The transmission used was a Voith L306r triple converter type; this had an input capacity of between 927-980hp, with engine rpm of between 1,445 and 1,500. The transmissions for Nos. D600 and D601 were assembled at Heidenheim, Germany, while those for Nos. D602-D604 were built under licence by NBL in Glasgow.

The D600 bogie design comprised a welded sub-assembly of two deep plates with ties and two cross-stretchers and a headstock. The main body weight was taken on each bogie by two bearers on each side, resting on the double swing-link bolster, which had transverse laminated springs suspended from the bogie. Timken roller bearing axle boxes were fitted and gave the D600s reasonable riding characteristics.

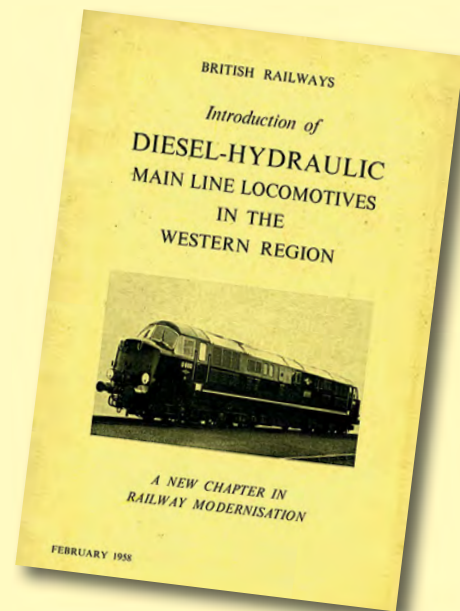
Braking equipment fitted was air for the locomotive and vacuum for trains. The air compressors were housed in the nose section, while the vacuum exhausters were located in the engine bay.

The D600s were fitted with a multiple control system enabling up to three units to be controlled by one driver. The same equipment was also fitted to the later-built lower-powered D6300 NBL locos enabling both types to operate in multiple.

Construction of the D600s commenced early in 1956 and the first, No D600 carrying the name Active was handed over to the BTC in December 1957, but it had previously operated a number of test trains in Scotland. Once on the Western Region the loco went to Swindon Works for commissioning before commencing test runs. When handed over, No. D600 was the first BTC Modernisation Plan locomotive to carry nameplates. All five being given names of British Warships. The D600s commenced regular duty from the third week in February 1958. ⇨

Below: With the North British Locomotive Co being based in Glasgow, Scotland, some early main line running of the D600s was carried out in south west Scotland. Here we see the first of the build, No. D600, powering a seven-car test train in Ayrshire in early January 1958, before heading south to Swindon for full acceptance. Note the old headlamps. NBL

Below Right: Cover of an eight page booklet given to Western Region staff at the time of introduction of the NBL D600s. CJM





A press run for the pioneer of the design took place on 17 February 1958 when No. D600 headed a 340-ton train from London Paddington to Bristol Temple Meads and return, with stops at Reading, Didcot and Swindon. On the return run, the use of two engines came into its own when one failed soon after leaving Bristol.

No. D601 was delivered in March 1958 and was initially allocated to Swindon. However, by June 1958, both were allocated to Plymouth Laira the remaining three locos Nos. D602-D604 were allocated to Laira from delivery.

Entering service between January 1958 and January 1959, the fleet operated on the London to Plymouth and Penzance route. Some significant milestones in diesel history were soon made, such as on 16 June 1958, when No. D601 hauled the Cornish Riviera Express non-stop between Paddington and Plymouth, the

first diesel locomotive to do so. At the time the maximum permitted load for a 'D600' was 375 tons.

The D600s continued on the fast London to Bristol / West of England trains until around 10 of the more powerful D800 'Warships' entered service. Subsequently the D600s were mainly restricted to duties west of Plymouth, finally withdrawn on 30 December 1967.

From delivery the D600s were painted in standard BR green-livery with a four-inch (102 mm) light grey horizontal band between the cabs, just above the solebar. In May 1967, the pioneer of the fleet No. D600 was repainted in standard rail blue with full yellow ends, another to receive blue was No. D602 which carried small yellow warning ends. Nos. D601, D603, and D604 remained in green, with yellow warning panels added in 1962. ■

Below: After handing over to the running department on 24 January 1958, No. D600 Active was used on a press run between London and Bristol and back on 17 February 1958, the formation of which included the GWR dynamometer car. The train is seen near Didcot on its return run. **CJM-C**



Above: Wired up for post-delivery testing, No. D601 Ark Royal poses outside Swindon Works in April 1958, while modification work was in progress. **Rail Archive Stephenson**

Technical Details

1957 BR number range:	D600-D604
Original class codes:	D20/2, later 20/4
BR classification:	Class 41
Built by:	NBL Ltd
Introduced:	1958-59
Wheel arrangement:	A1A-A1A
Weight (operational):	118 tonnes
Height:	12ft 10in (3.91m)
Width:	8ft 8in (2.64m)
Length:	65ft (19.81m)
Min curve negotiable:	4½ chains (90.49m)
Maximum speed:	90mph (145km/h)
Wheelbase:	50ft (15.24m)
Bogie wheelbase:	15ft (4.57m)
Bogie pivot centres:	35ft (10.67m)
Wheel diameter (driving):	3ft 7in (1.09m)
Wheel diameter (middle):	3ft 3½in (1m)
Brake type:	Vacuum
Sanding equipment:	Pneumatic
Route availability:	5
Heating type:	Steam - Spanner Mk 1
Multiple coupling restriction:	Orange Square
Brake force:	88 tonnes
Engine type:	2 x NBL L12V 18/21A
Total horsepower:	2,000hp (1,491kW)
Power at rail:	1,700hp (1,267kW)
Tractive effort (max):	50,000lb (222.4kN)
Cylinder bore:	7.1in (180.4mm)
Cylinder stroke:	8.3in (210.8mm)
Transmission type:	Voith L306r
Fuel tank capacity:	800gal (3,640lit)
Cooling water capacity:	120gal (545lit)
Lub oil capacity:	60gal (273lit)
Boiler water capacity:	1,000gal (4,550lit)
Boiler fuel capacity:	From main tank



Left: With a small family group of admirers on the platform at Paddington, the new order of Western Region diesel traction is examined on 30 March 1959. No. D604 Cossack, delivered just two months prior, waits to depart from the London terminal with a West of England express. At this time neither the steam-era disc reporting system was in use or a train number 'slat', just a single oil headlamp was carried.
Brian Stephenson

Right: Carrying 'slat' train reporting number 765, No. D601 Ark Royal awaits attention at Swindon Works in April 1960. Records show this loco was out of service at Swindon Works for 55 days between 22 March and 4 May 1960 for 'unspecified' attention.
www.colour-rail.com

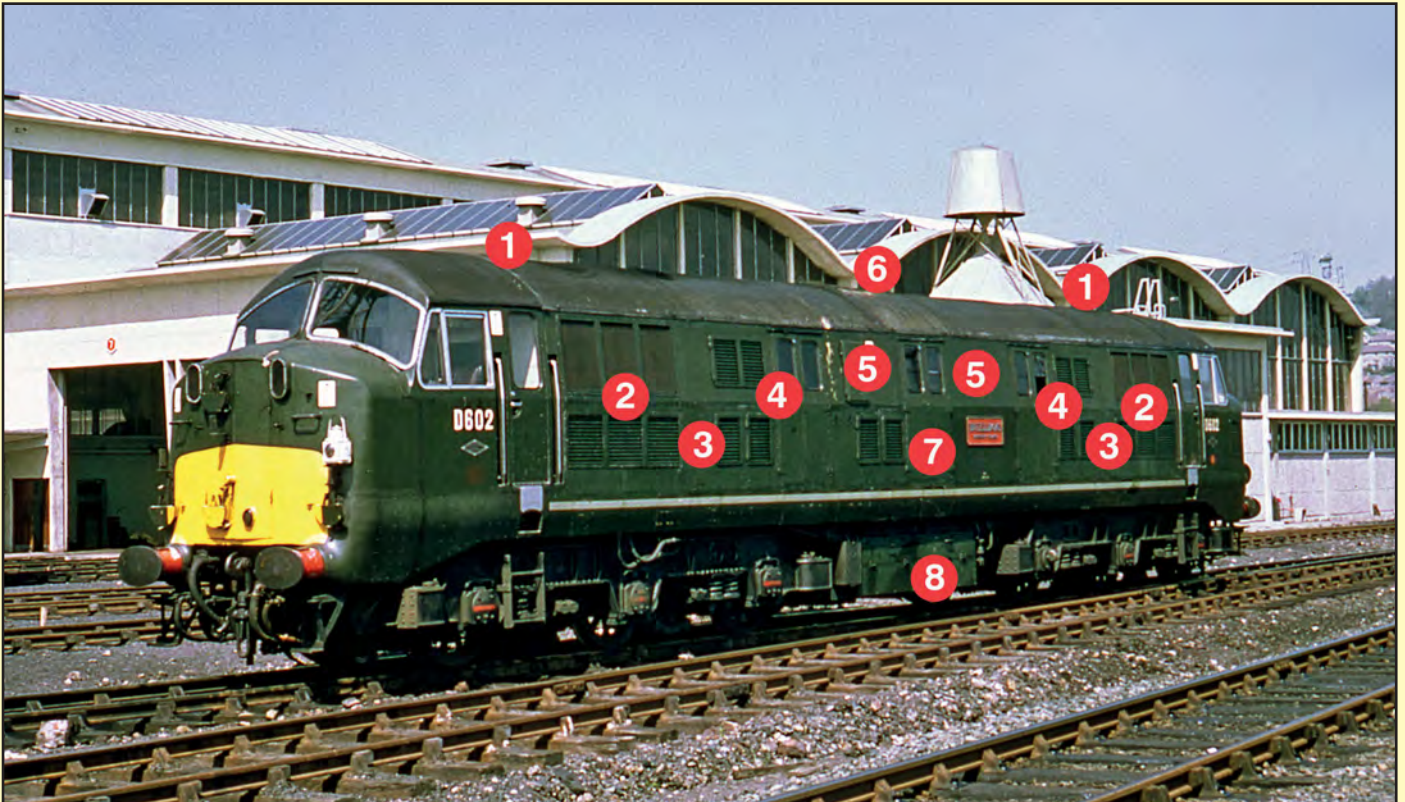


Below: With a father showing his son the new order of traction on the Western Region, North British D600 No. D603 Conquest stands in the 'up' platform at Paignton in July 1959 awaiting to depart for London with the Torbay Express. This loco, allocated to Laira, entered service the previous November. www.colour-rail.com

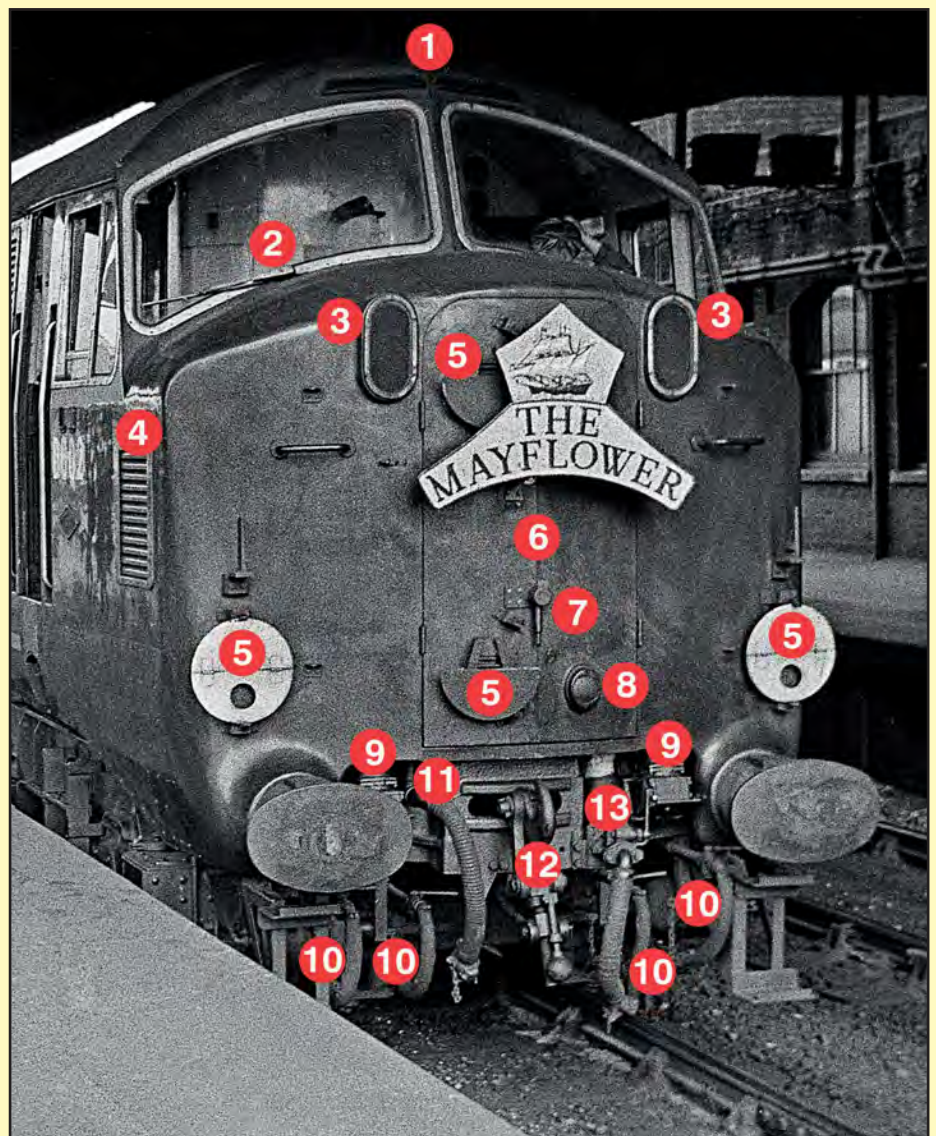




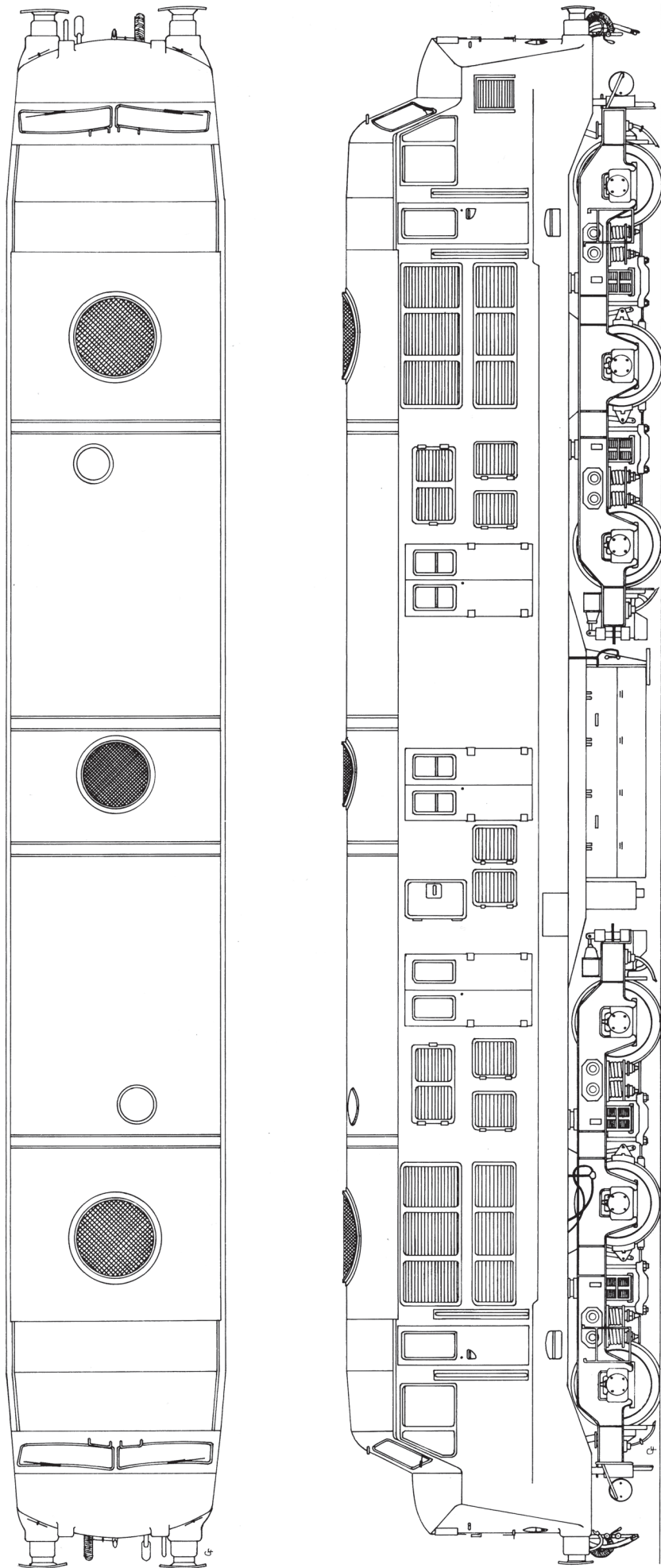
D600 Walkround



Above: D600 equipment positions. 1: Roof radiator fan, 2: Side radiator grilles, 3: Position of transmission, 4: Position of engine, 5: Position of fuel tank, 6: Roof vent for boiler compartment, 7: Position of train heating boiler, 8: Batteries and water tanks. www.colour-rail.com



Right: D600 design front end equipment positions, prior to installing split four character route indicator boxes. 1: Air ventilation grilles for cab, 2: Windscreen wiper, 3: Horn grilles, 4: Nose section air intake grille, 5: Train reporting hinged disc, when open revealed white frontal marker light, 6: Nose end communication doors (allowing crew interchange between locos when working double headed), 7: Nose end door latch, 8: Red rear marker light, 9: Multiple control jumper equipment, 10: Engine control air pipes, 11: Vacuum brake pipe, 12: Coupling, 13: Steam heating pipe. www.rail-online.co.uk



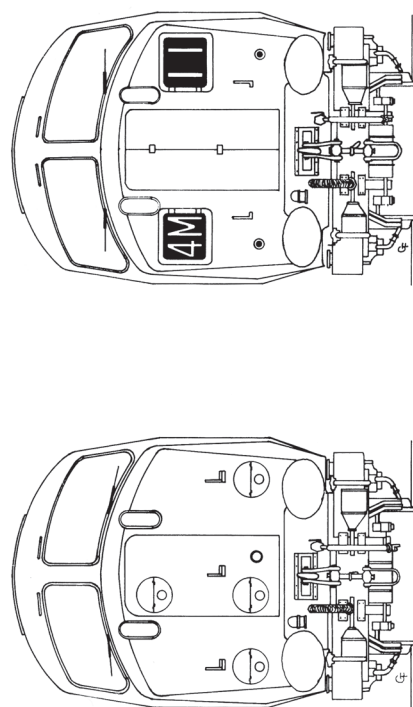
Top: North British Loco Co D600 'Warship' roof detail.

Middle: North British Loco Co D600 'Warship' side detail.

Far Left: North British Loco Co D600 'Warship' front end detail showing original design.

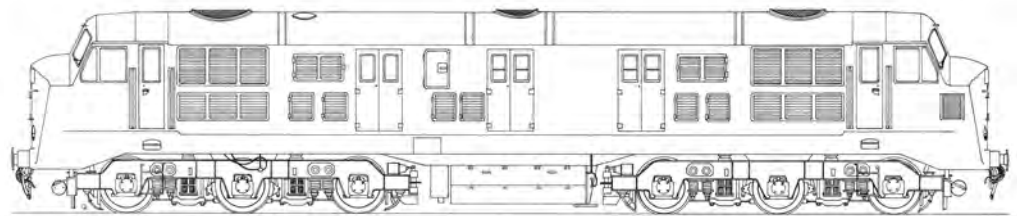
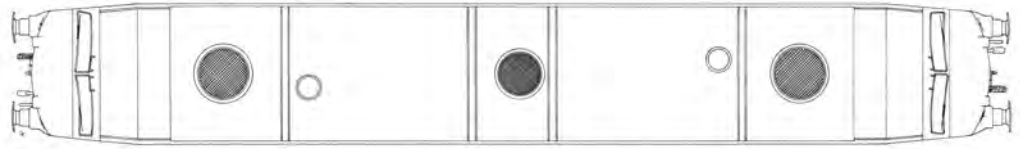
Left: North British Loco Co D600 'Warship' front end detail showing revised design with split four character headcode boxes.

Class 41



The drawings are reproduced in exact OO gauge 1:76 - 4mm to the foot scale
 All: © Graham B. Fern. Additional line drawings of main line locomotives
 can be found in the Oxford Publishing Co book British Rail Main Line Diesel
 Locomotives - ISBN 0-86093-544-2

The drawings are reproduced in exact N gauge 1:148 - 2.02mm to the foot scale.



Top: North British Loco Co D600 'Warship' roof detail.

Above Right: North British Loco Co D600 'Warship' side detail.

Above Left: North British Loco Co D600 'Warship' front end detail showing original design.

Above Middle: North British Loco Co D600 'Warship' front end detail showing revised design with split four Character headcode boxes.

Class 41

Right: The driving cab for the D600s used the pedestal design. With the master switch and power controller located on a stand to the right of the drivers position, which was located on the left side of the cab. In front of the driver on an inclined panel were the main gauges, while the straight air brake controller and train vacuum brake controller were located on the left of the drivers position. On the fireman's or secondman's side lighting and boiler control switches were located. **CJM-C**



Below: Soon after commissioning, the D600s were to be found on the crack Western Region names expresses, replacing steam traction. In this view, No D601 Ark Royal approaches Sprey Point, Teignmouth with the down 'Cornish Riviera Express' on 2 September 1958, some six months after entry into service. **K. L. Cook / Rail Archive Stephenson**





Above: In days when the lineside in the London area was much less cluttered with vegetation and buildings and access was easy, this was the view recorded at West Drayton on 8 November 1958. It shows No. D600 Active heading west with the down 'Royal Duchy' from Paddington to Penzance. The train is on the main line, the closest track was a siding which has long since been removed.

K. L. Cook / Rail Archive Stephenson



Left Middle: With its distinctive steam era headboard attached, No. D601 Ark Royal pulls away from Paddington on 8 May 1959 with the westbound 'The Royal Duchy' bound for Penzance. www.colour-rail.com



Left Below: With a group of railwaymen on the platform, including the diesel riding inspector in his white overalls, the pioneer of the 'Warship' breed stands awaiting time to depart from Plymouth with the westbound 'Cornish Riviera Express' in summer 1959. Several drivers who operated the early 'Warship' locos have mentioned that when the windscreen wipers were 'parked' they tended to move to the mid-screen position, interfering with the driver's view of the route ahead.

www.colour-rail.com



Above: Recorded from the photographic viewpoint at Sprey Point, mid way along the Teignmouth Sea Wall between Teignmouth station and Parsons Tunnel, No. D604 Cossack skirts the sea wall with the 06.25 Penzance to Paddington express on 18 June 1959. The train is formed of a wonderful collection of 'blood and custard' BR Mk1s and an ex-GWR dining car. **K. L. Cook / Rail Archive Stephenson**

Below: Another view recorded from Sprey Point, Teignmouth, but this time slightly closer to the railway to include part of Teignmouth in the distance and the distinctive tower of St Michaels church. Recorded on dull 2 September 1958, No. D600 Active powers the up 'Cornish Riviera Express' bound for Paddington. **K. L. Cook / Rail Archive Stephenson**





D600s on the Road

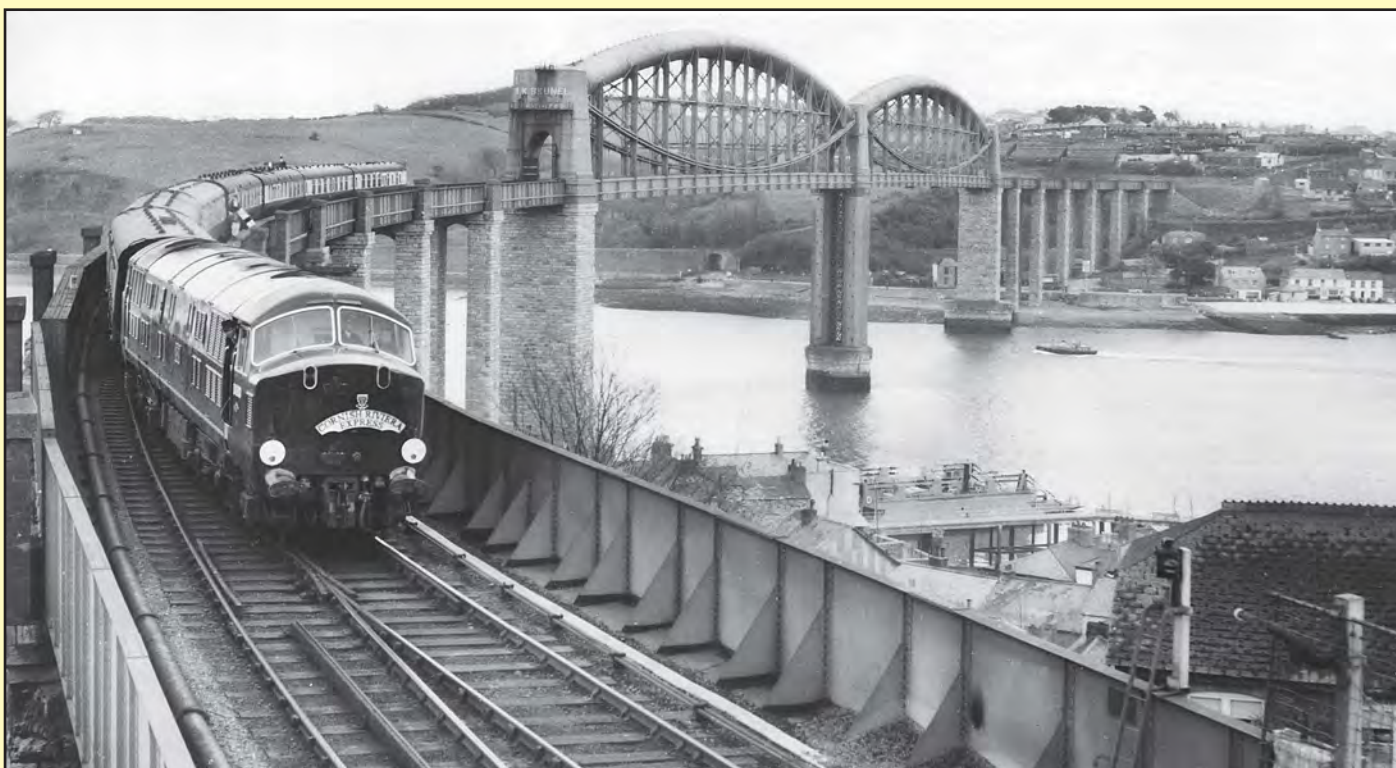


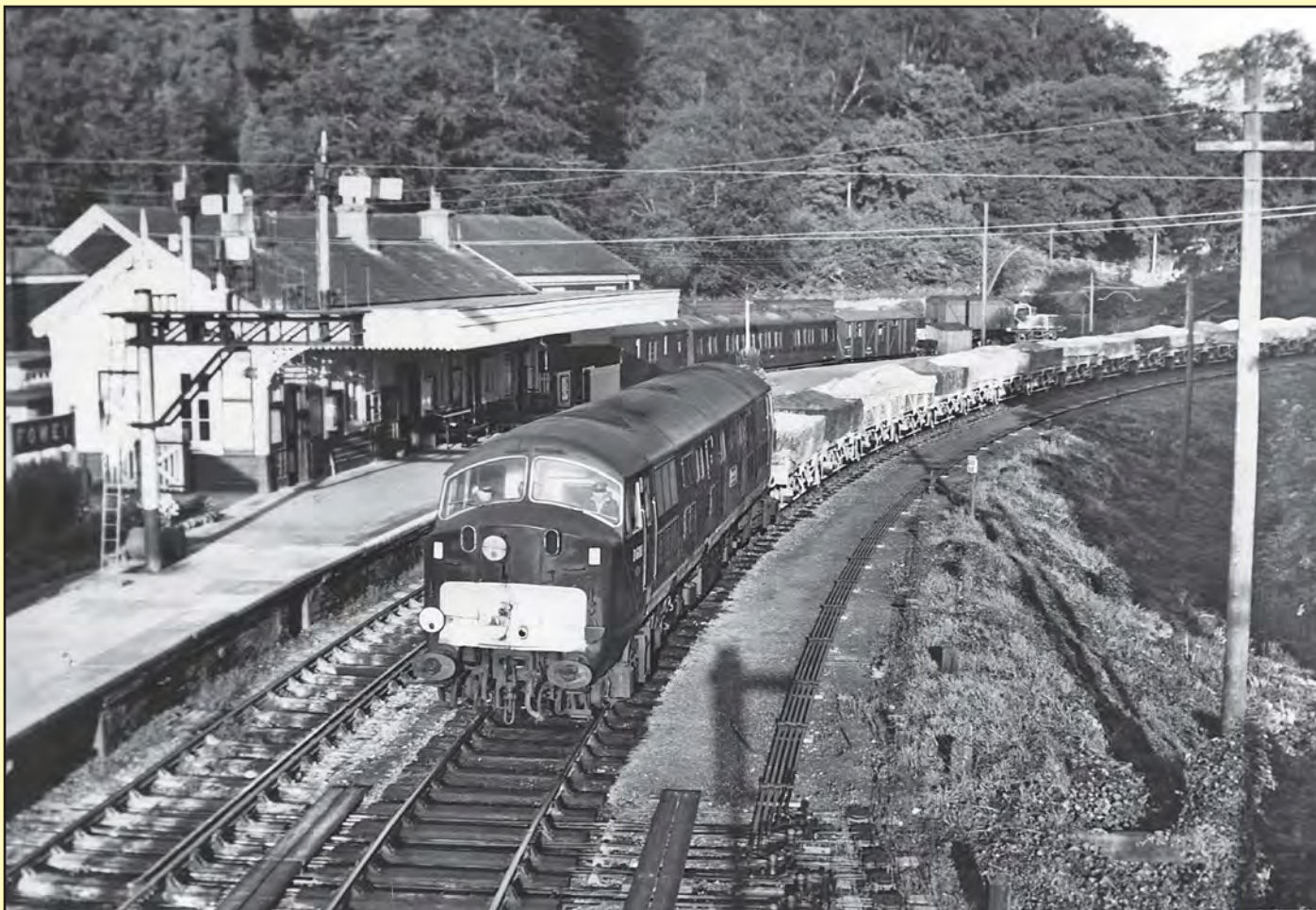
Above: On 3 October 1959 the first of the build, No. D600 Active, passes Westbourne Park, hauling a rake of chocolate and cream liveried Mk1 stock on a Bristol bound service. **R. C. Riley**



Left: On 26 April 1958, No. D601 Ark Royal hurries through Chipping Sodbury with a test run from Swindon during the locos commissioning period. **Ivo Peters**

Below: In the days before the Tamar suspension bridge was built taking the A38 over the river between Devon and Cornwall, No. D600 Active heads towards Penzance with the 'Cornish Riviera Express' in mid 1958. **CJM-C**





Above: Between February and August 1962 small yellow warning ends were applied to the five D600 series 'Warships' making a start at improving the observation of approaching trains for track staff. On a rare freight working powered by a D600, No. D603 Bulldog passes through Fowey station in September 1963 with a St Blazey to Fowey Harbour loaded clay train. **A. Crowther**



Right Middle: Slowing for the station stop at St Erth and providing a connection with the St Ives branch train, D600 'Warship' No. D604 Cossack powers a Penzance bound service on 25 May 1965. By this time the deployment of NBL A1A-A1A 'Warships' in the far west was reducing, with production NBL B-B 'D800s' and BR D1000 class locos operating the majority of services. **K Nuttall / www.colour-rail.com**



Right Below: Photographed at Swindon Works on 18 June 1962, No. D602 Bulldog shows the small yellow warning end which it gained just nine weeks prior. The record books show that the D600s spent a considerable amount of time at Swindon Works receiving either classified or casual repairs during their short operating life. **K Nuttall / www.colour-rail.com**



Above: An undated image, recorded before April 1962, shows No. D602 Bulldog stopped at Liskeard in Cornwall with a Penzance to Plymouth service, formed of a motley collection of company and BR stock. On the right of the loco is the Looe branch. **B Swain / www.colour-rail.com**

Below: It is not often that pictures turn up showing the two different designs of 'Warship' together. In this view recorded in the summer of 1961, we see NBL D600 'Warship' No. D603 Conquest, coupled to BR Swindon built D800 'Warship' No. D807 Caradoc. The differences in length and green livery style are quite noticeable. **www.colour-rail.com**



D600 Fleet List

1957 number	Name	Date named	Built by	Works number	Date introduced	First depot	Date withdrawn	Final depot
D600	<i>Active</i>	01/58-12/67	North British Locomotive Co, Glasgow	27660	Jan-58	82C	Dec-67	84A
D601	<i>Ark Royal</i>	03/58-12/67	North British Locomotive Co, Glasgow	27661	Mar-58	82C	Dec-67	84A
D602	<i>Bulldog</i>	11/58-12/67	North British Locomotive Co, Glasgow	27662	Nov-58	83D	Dec-67	84A
D603	<i>Conquest</i>	11/58-12/67	North British Locomotive Co, Glasgow	27663	Nov-58	83D	Dec-67	84A
D604	<i>Cossack</i>	01/59-12/67	North British Locomotive Co, Glasgow	27664	Jan-59	83D	Dec-67	84A



Above: Between 13 February and 10 May 1962, No. D600 Active received classified attention at Swindon Works, which resulted in a repaint in BR loco green and the addition of its yellow warning panel ends. Just before return to service the loco is seen in the works yard. **T Owen / www.colour-rail.com**

Below: On 8 May 1967, No. D600 Active was released from Swindon Works painted in full BR corporate rail blue livery, with full yellow warning ends, the only loco of the fleet to be so treated. It also sported split four character route indicators. The loco is seen at Plymouth with a van train. **www.rail-online.co.uk**



Status code	Disposal detail/present owner	Date cut up	Lifetime Mileage*	* Estimated mileage based on official loco folders held at Swindon, rounded down to nearest 1000.
C	D Woodham, Barry	Mar-70	637,000	Key to table on left: 82C - Swindon 83B - Laira 84A - Laira C - Cut up
C	D Woodham, Barry	Jun-80	587,000	
C	J Cashmore, Newport	Aug-68	500,000	
C	J Cashmore, Newport	Aug-68	512,000	
C	J Cashmore, Newport	Aug-68	480,000	



The D800 'Warships'

Subsequent to an agreement between the German patent holders and the BTC on British construction of the equivalent of the German V200 diesel-hydraulic design, there were no further plans for NBL D600 type, but NBL Springburn was to be involved in the D800 build.

Due to the restrictive UK loading gauge, 'off the shelf' German V200s could not be operated on BTC tracks, the V200s being taller and 16in (40.65cm) wider than the maximum BTC gauge. In the months following the agreement, several hundreds of drawings were supplied to the BTC by Krauss-Maffei (KM) and a staggering 75,000 man-hours were spent preparing drawings for the British build.

At an early stage it was stressed that lightness, strength and a four-wheel (B-B) bogie configuration were to be adopted, to achieve an all-in weight of around 80 tons. Stressed skin body techniques, similar to those used in the aviation industry, were to be employed, thus giving the thin plate body sides and roof stress/load bearing factors. No separate underframe was employed; the body superstructure supported all equipment except the bogies, which had to withstand all drag forces and up to 200 ton buffing loads.

All main body superstructure members were manufactured out of mild steel, the main members being two 6½in (16.5cm) section tubes running from end to end. For the V200s, these extended from the buffer-centre positions, but on the D800s, with space and equipment problems, this was not possible. Therefore their main 'tubes' ran through a number of cross-stretchers which in turn had to be welded to plate longitudinals. All were welded into one honeycomb assembly, which was supplemented by back plates, drag boxes and the drawgear. Welded to this structure were the main side lattice members on to which were mounted the side sheets which continued upwards to form the non-removable load bearing roof section sides. To ensure maximum rigidity for the fabricated structures, only two small windows were positioned on each side. The complete body structure weighed just 11.13 tons.

The bogie used for the D800s was also a KM design, but did not prove to be totally satisfactory, especially in the higher speed ranges. Brake equipment was similar to that installed on the D600s - air for the locomotive, and vacuum for the train. Over the years a number of bogie modifications were carried out to improve ride and extend life of components.

The internal layout of the D800s consisted of a centrally positioned train heating boiler of either Spanner or Stones supply, with a Maybach MD650 engine and a Mekydro K104 transmission unit on each side, together with an independent cooler group. One problem that did not arise on the German V200s was a shortage of internal space. However, on the D800s space was at a premium and the cab-cab walkway was difficult to negotiate with equipment and shafts running just above floor height.

The original order for the D800 breed was for just three locomotives, for these Maybach/ Mekydro produced six engine/ transmission and cardan shaft assemblies for installation into the Swindon built locos. The supply cost of which was only a little over cost price and, if the equipment proved satisfactory and the BTC decided to place a follow-on contract, a British licensee would be found.

Construction of the first three D800s forming the Pilot Scheme contract, commenced at Swindon Works in July / August 1957, but before these were delivered a subsequent order for 30 identical locos was placed, conforming to the same design but incorporating a number of minor detail differences. The production power units and transmissions arrived in the UK in 'kit' form and were assembled by Bristol Siddeley Engines (BSE) at Filton near Bristol, the UK licensees for the equipment.

As the production run continued at Swindon a number of modifications were made to the transmission and other parts. Mainly after running experience with the three original locos. It also became apparent that the original six power notches on these locos were insufficient; the lowest (0) was for engine idling, followed by six 'power' notches. As production units came off the building line seven 'power' notches were incorporated, and this, together with a different control system, precluded the two types from being operated in multiple. The multiple operation equipment installed did cause a number of problems over the years, mainly involving the units going to earth, caused by dirt and water in the jumper heads. By the mid-1960s the equipment was removed from many 'D800s' in an attempt to improve reliability. However, revised diagramming in 1968, required the double heading of a number of passenger services, this saw the equipment reinstated on many locos.

'Warship' production at Swindon continued until October 1961 when the last of the build, No D870, was released.

One locomotive worthy of special mention is No. D830 which, when built in early 1961, was fitted with two Paxman 12YJX power units each developing 1,100hp (895kW) at 1,530rpm. These non-standard units were a new product from Paxman and were built as a direct competition to European engines of like output. The two units remained in the loco all its life but were not on par with the Maybach or MAN engines.

The final batch of D800s, Nos. D833-D865, were ordered on 3 July 1958 from the NBL Co of Glasgow and were fitted with MAN L12V 18/21B power units and Voith LT306r transmissions. The mechanical portion was similar to the Swindon products, and a full set of drawings were supplied to NBL by the BTC. All necessary modification drawings resulting from the installation of MAN/ Voith equipment was carried out in Glasgow.

The MAN L12V 18/21B units installed in the D833s were assembled in Glasgow under a licence arrangement, likewise the Voith transmission units. The first NBL loco, numbered D833, emerged in July 1960, but for several weeks previously had undergone test and proving specials in Scotland.

Completed locomotives were operated south under their own power to Swindon Works where full commissioning was undertaken.

A number of detail differences were to be found on the '800s'; Nos. D800-D812 were originally fitted with Great Western 'steam era' style train reporting number frames on the front end, supplemented by lamps and folding discs to indicate train classification. The steam era reporting system was installed as the new standard design of four-character train reporting was still under development. From No. D813, four-positioned hand wound 'headcode' blinds were fitted. Also from No D813, two 'letterbox' doors were installed under the cab side windows, level with the bottom of the cab door to provide access to isolating valves; these were retro fitted to the 13 original locos.

Various designs of below cab-door kick-plates were tried out over the years. Firstly, a green rubber plate was fitted, but this was later replaced by vertical rib kick plates. Different train heating boilers were installed. Nos. D800-D812 and D866-D870 were fitted with Spanner Mk 1a boilers, while Nos. D813-D817, D819-D865 had Stone-Vapor OK4616 equipment. No. D818 was the odd man out fitted with a Spanner Mk III boiler. Ventilation of the boiler compartment in early years gave cause for concern and on the NBL locos slit grilles were cut in the sloping roof on one side only adjacent to the

Left: How the production design of D800s might have looked if a direct purchase of the German design had been possible. Deutsche Bundesbahn (DB) V200 No. 220 074-9 is seen passing Salzbergen, north of Munster on 10 August 1972. **Bernard Mills**

Right Top: Throughout 1959-1960, the main Swindon 'A' Shop was full of 'Warship' locos under construction, sharing workshop space with the final steam locos receiving overhaul and other early diesel-hydraulic locos. Taken on 3 May 1959, this view shows seven locomotives under assembly. **T Owen / www.colour-rail.com**

Right Below: Taken in the autumn of 1960, 'Warship' No. D826, soon to be applied with its Jupiter nameplates, stands in the works yard at Swindon painted in red oxide, just prior to visiting the paint shop for an application of green paint. This loco was released from Swindon Works on 7 September 1960 and allocated to Laira depot. **www.colour-rail.com**





boiler, this modification was applied to earlier locos as they passed through works.

The last of the build, No D870, was recognisable from the remainder of the fleet by having warning horns placed on the cab roof behind a grille, rather than under the buffers.

All the D800s were given names of Warships of the British Navy with the exception of No. D800 Sir Brian Robertson (after the first Chairman of the BTC) and No. D812 named *The Royal Naval Reserve 1859-1959*, thus marking the centenary of the organisation.

The livery applied to the D800s when introduced was BR standard locomotive green, with an off-white body side band, and grey roof and white running numbers. The aluminium nameplates carried a red ground. From the 1964 a sizeable number of 'Warships' were outshopped in maroon livery (as detailed in the livery table), on these locos the nameplates were given a black ground. After 1967, as locomotives passed through Swindon Works for classified overhauls, they emerged in standard BR rail blue livery, mainly with full yellow warning ends. No. D865 the first to be repainted rail blue, carried a brown skirt, in an attempt to combat discolouration caused by brake dust!

As a result of BR's policy on standardisation using diesel-electric traction the D800s were deemed to have only a short working life. The first withdrawals took place in 1968 and the class finally passed into history from 16 December 1972 when the final example, No D832, was withdrawn. Details of introductions and withdrawals can be found in the fleet table.

Warship Operations

The main objective of the 1955 Modernisation Plan was to eliminate steam traction west of Newton Abbot. The WR opted for diesel-hydraulic traction mainly because of its better power to weight ratio so it was ironic that the first locomotives to enter service were five massive 117-ton A1A-A1As built by NBL. D600 was delivered to Swindon on

14 January 1958. No. D601 arrived in March and, on 16 June 1958, took the 'Cornish Riviera Express' out of Paddington five days before the 'Flying Scotsman' first left King's Cross behind an 'English Electric' Type 4 (Class 40). Meanwhile both Nos. D600 and D601 were engaged on running-in trips and dynamometer car trials. These showed that the maximum load the Type 4 diesels could reliably handle over the South Devon banks was 10 coaches, so piloting was still necessary for the summer holiday trains, initially with steam locomotives and later with the small North British Type 2 diesels.

From August 1958, Nos. D600 and D601 took over the 'Cornish Riviera Express' between Paddington and Plymouth and where soon joined by the first of the Swindon-built D800s, the first of which made its official appearance on 14 July 1958. During the autumn of 1958, No. D800 usually worked the up 'Cornish Riviera Express' returning

on the 18.30 Paddington to Bristol and thence to Plymouth. D600 meanwhile was booked for the up Penzance sleeping car express and the down 'Cornish Riviera Express' while D601 frequently took the 07.15 Plymouth to Paddington and 13.30 return.

By early 1959 Swindon was about to deliver its production series of 33 D800s and NBL their 33 D833 class. The final five locos, Nos. D866-D870 were constructed at Swindon. Swindon delivered its 'Warships' at the rate of one a month commencing in March 1959 and for the summer service enough were available to replace steam on the 'Bristolian' and cut the non-stop schedule from 105 to 100min. However, this high-speed running revealed riding problems with the bogies of the D800s and a speed limit of 80mph (129km/h) was imposed which lasted for two years until modifications had been made. Meanwhile, the 'Bristolian' reverted to steam power. →





Left: Taken on 3 May 1959, one month before its release into traffic, No. D806 Cambrian sits in Swindon 'A' shop in the company of NBL A1A-A1A No. D600, which was receiving upgrade and casual repairs.

T Owen / www.colour-rail.com

Right: At the time of the construction of the Swindon 'Warships', the works allowed regular visits and tours for rail enthusiasts and thus a number of pictures were recorded. Taken on 18 September 1960, No. D826 Jupiter is seen nearly complete, while a group of enthusiasts approach to inspect the new product.

Brian Stephenson

Below: The North British Loco Co constructed 'Warships' usually operated under their own power from the assembly shop in Glasgow to Swindon Works. On 17 August 1961, No. D853 Thruster takes a short break at Carlisle while en route to Swindon. This loco entered traffic from Laira on 30 August 1961.

www.rail-online.co.uk

The autumn of 1959 saw the 'Torbay Express' rostered for diesel power, but the replacement of steam was only gradual. At the beginning of 1960, two years after D600 had been delivered, there were still only 20 'Warships' in service. NBL was busy building Type 2s and it was not until July that its deliveries commenced with D833. In the 1960-61 winter timetable all Paddington-Plymouth trains were rostered diesel power as well as about half of the Bristol-London services and by early 1961, only two trains on this route remained steam hauled.

The NBL A1A-A1As were still working the Paddington route at this time and No. D600 distinguished itself on 16 March 1961 by derailling at Newbury with the up 'Cornish Riviera Express'. As more of the D800s arrived, the activities of the D600s became confined to Devon and Cornwall. The 'Warship' diagrams included balancing workings on non-passenger duties such as milk trains from Kensington Olympia and fitted freight from Paddington Goods.

The 1961-62 winter timetable was recast on a regular interval basis and during its currency the WRs 'Hymeks' and 'Western' diesels commenced.

Initially these were used to replace steam on the routes to South Wales and Wolverhampton and the 'Warships' were left in command of the West of England diagrams. On the cross-country services via Bristol they exchanged there on trains via Birmingham to LMR steam or increasingly to 'Peak' diesels. From summer 1962 the change to steam traction on the West to North expresses via the Severn Tunnel was eliminated and the 'Warships', usually of the NBL series, worked through to Crewe.

Very little steam activity remained west of Newton Abbot by the end of 1962, but D1000 'Western' locos did start to appear. 'Hymeks' now worked some of the slower Paddington-Bristol trains and on summer Saturdays took over more of the service to free 'Warships' for holiday extras to Devon and Cornwall.

Ominously for hydraulic traction the Brush Type 4s were allocated to the WR at the end of 1963. Based at Old Oak Common one made its first appearance at Plymouth in May 1964. However, the WR takeover of the former SR lines west of Salisbury brought new activity for the 'Warships'. They had occasionally worked trains over the SR route between Exeter and Plymouth

but from August 1964 they began working from Exeter to Waterloo and, for the last weeks of its existence, they were rostered for the up 'Atlantic Coast Express'.

The 'Warships' took over the new semi-fast service between Waterloo and Exeter from 7 September 1964, in which through workings beyond Exeter ceased except for the Brighton-Plymouth train.

The allocation of the 'Warships' at the end of 1964 comprised 34 at Newton Abbot (83A) and 42 at Laira (84A), including the five D600s. The Swindon and NBL varieties of the D800s were divided between both depots.

By 1965, the Paddington-Bristol route was largely in the hands of Brush Type 4s while the 'Westerns' worked widely on both the Westbury and the Bristol routes to the West. By 1964 diesel schedules improved those of steam on the West of England route, with at last Plymouth reached in under four hours. The use of 'Westerns' meant 'Warships' could be increasingly used on parcels, milk and freight trains. Besides their journeys to Waterloo they penetrated the SR on freight trains via Westbury to Southampton Docks.

During Bournemouth electrification work, ⇒





Technical Detail

1957 BR number range:	D800-D832, D866-D870	D833-D865
Original class codes:	D800-D802 - D22/1, later 22/1 D803-D832/D866-D870 - D20/1, later 20/1	D22/2, later 22/2, 22/4
BR Class code:	42	43
Built by:	BR Swindon	NBL Ltd
Introduced:	1958-1961	1960-62
Wheel arrangement:	B-B	B-B
Weight (operational):	79 tonnes	79 tonnes
Height:	12ft 9½in (3.90m)	12ft 9½in (3.90m)
Width:	8ft 8½in (2.65m)	8ft 8½in (2.65m)
Length:	60ft (18.29m)	60ft (18.29m)
Min curve negotiable:	4½ chains (90.49m)	4½ chains (90.49m)
Maximum speed:	90mph (145km/h)	90mph (145km/h)
Wheelbase:	48ft 3in (14.70m)	48ft 3in (14.71m)
Bogie wheelbase:	10ft 6in (3.20m)	10ft 6in (3.20m)
Bogie pivot centres:	37ft 9in (11.51m)	37ft 9in (11.51m)
Wheel diameter:	3ft 3½in (1m)	3ft 3½in (1m)
Brake type:	Vacuum	Vacuum
Sanding equipment:	Pneumatic	Pneumatic
Route availability:	6	6
Heating type:	D800-D812, D866-D870 - Steam - Spanner Mk 1a D813-D817, D819-D865 - Steam - Stones OK 4616 D818 - Steam - Spanner Mk 3	Steam - Stones OK 4616
Multiple coupling restriction:	D800-D802 - Not fitted D803-D832 / D866-D870 - White Diamond	White Diamond
Brake force:	35 tonnes	35 tonnes
Engine type:	D800-D829, D831-D832, D866-D870 - 2x Maybach MD650 D830 - 2x Paxman 12YJXL	2 x NBL/MAN L12/ 18/21
Total horsepower:	D800-D803 - 2,000hp (1,491kW) D804-D829, D831-D832, D866-D870 - 2,200hp (1,641kW) D830 - 2,400hp (1,790kW)	2,200hp (1,641kW)
Power at rail:	D800-D803 - 1,700hp (1,268kW) D804-D829, D831-D832, D866-D870 - 1,750hp (1,305kW) D830 - 1,800hp (1,342kW)	1,800hp (1,342kW)
Tractive effort:	52,400lb (233kN)	49,030lb (218kN)
Cylinder bore:	7¾in (196.8mm)	7.1in (180.3mm)
Cylinder stroke:	8¾in (209.5mm)	8.3in (210.8mm)
Transmission type:	Mekydro K104	Voith LT306r
Fuel tank capacity:	800gal (3,640lit)	800gal (3,640lit)
Cooling water capacity:	270gal (1,228lit)	270gal (1,228lit)
Lub oil capacity:	90gal (409.5lit) (D830 = 70gal (318.5lit))	76gal (346lit)
Boiler water capacity:	940gal (4,277lit)	940gal (4,277lit)
Boiler fuel supply:	From main tank	From main tank

the overnight mail and newspaper trains from Waterloo were often diverted via the graded Mid-Hants and Portsmouth lines. 'Warships' were in regular use.

For several years the D600s had been confined to Cornwall where Laira staff understood their peculiarities were on hand. However, a decision to transfer some of the WR Class 37s from South Wales to the Eastern Region saw Nos. D601, D602 and D604 transferred to Landore in August 1967, out-based at Pantyffynon, they were tried out on the mineral branches at the south end of the Central Wales line. Clearance difficulties were experienced and the trio were soon returned to Laira. Under the National Traction Plan the class was non-standard and withdrawal of all five took place at the end of 1967.

The inauguration of the Euston-Birmingham electrification in March 1967 had involved the replacement of the Paddington to Wolverhampton expresses by a Paddington to Birmingham service via High Wycombe. It was felt that these trains did not justify Class 47 haulage and in summer 1967 most of the NBL 'Warships' were transferred to Old Oak Common. They took over the Birmingham service at the start of the 1967-68 winter timetable and during the Paddington resignalling in October and November 1967 found themselves working in and out of Marylebone. The problems of diesel-hydraulic working into the LMR very soon brought about the return of the Class 47s to the route. However, the Old Oak Common 'Warships' began to work on the Paddington-Worcester-Hereford line from early 1968 but they never completely replaced the 'Hymeks' and Class 47s on this service.

WR management felt there was a commercial

need to accelerate the West of England services, this was done by coupling two 'Warships' in multiple to provide a nominal 4,400hp. Thus the summer of 1968 brought the swansong of the 'Warships'. Fifteen of the Swindon-built locomotives were refitted for multiple-unit control and put to work in pairs on two diagrams covering the principal trains between Paddington and Plymouth, including the 'Cornish Riviera Limited', reducing the journey time to three and a half hours in 1969.

As part of the drive for standardisation the three Swindon prototypes, D800-D802 were withdrawn in 1968. In 1969, 'Peak' diesels were allocated to Bristol (82A) and the motive power frontier at Bristol began to be replaced by through workings from Devon to the northeast.

The curtailment of the Brighton-Plymouth train at Exeter in 1967 was a prelude to the complete closure of the SR line as a through route in May 1968. Remarkably, nine months later in February 1969 when the coastal route through Dawlish was blocked by storm damage, D865 with a snowplough, preceding D827 on a freight train, made a hazardous journey over the abandoned line.

The allocation of the 'Warships' at the end of 1969 was 10 Class 43s to Old Oak Common, 11 Class 42s and 19 Class 43s to Newton Abbot and 23 Class 42s to Laira. Already some of the 43s had been withdrawn and others were stored. Old Oak Common lost its 'Warships' in October 1970 and the remaining Class 43 locomotives were concentrated at Newton Abbot.

The double headed duties were replaced by a single Class 47 or 'Western' from mid-1970. The 'Warships' could still produce good performances to and from Paddington usually on the Paignton

services. They could still be seen on the Worcester line during 1971 despite the transfer of the Class 43s to Newton Abbot. Of course, the class remained very active between Plymouth and Penzance but could now be found on such menial tasks as Exeter-Barnstaple locals and the Dainton banker, while three were out-stationed at St Blazey for trip workings on the Cornish china clay traffic.

Class 43 locomotives were priority for withdrawal, due to the difficulty of obtaining spare parts and they had all gone by October 1971. From 4 October 1971, the Exeter-Waterloo service was handed over to the SR Class 33 locos, though the Class 42s continued to reach Waterloo for some months after this on excursions and the Sherborne school specials.

The 19 surviving 'Warships' were now all allocated to Laira and they enjoyed a brief reprieve in 1972 by their use on a six times daily service of stone trains from Westbury to Gatwick or Merstham via Woking with material for the M23 and M25 motorway construction. Unkempt and often stripped of nameplates, they maintained this shuttle service until Class 47s took over in November 1972. Meanwhile, Laira could still turn out its other surviving 'Warships' for express work right up to the time of final withdrawal in December 1972.

During their existence the 'Warships' were involved in only two reported major accidents; on 25 August 1962 D833 stalled on the climb out of Torquay and a following steam-hauled working collided with the rear of its train. More seriously, D853 on the 09.45 Paddington-Bristol was derailed at high speed on the crossovers at Foxhall Junction, Didcot, on 27 September 1967. ■



Left: Swindon built 'Warship' No. D817 Foxhound passes Tiverton Junction on 8 August 1962 powering the 05.30 Paddington to Plymouth service. This loco entered service on 9 March 1960, allocated to Plymouth Laira depot. **M. J. Fox / Rail Archive Stephenson**



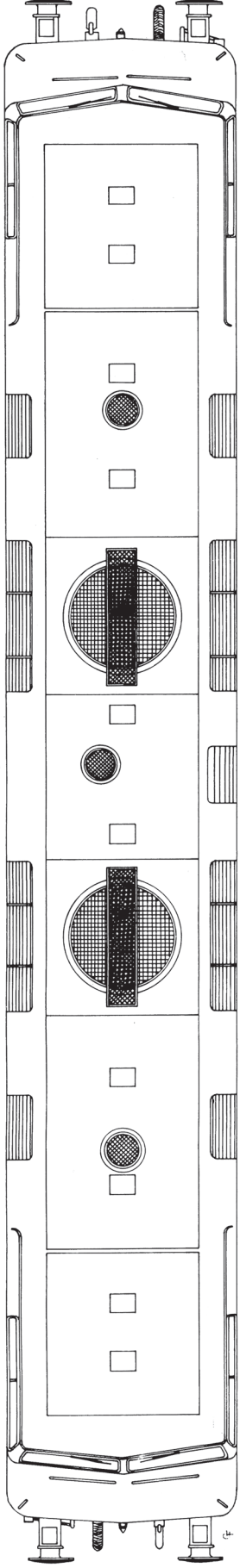
Below: In the 1960s the 'Warships', mainly the NBL built examples, were a common sight on the Western Region route to Shrewsbury. On 23 June 1962, No. D854 Tiger departs from Shrewsbury on the 12.25 inter-regional service from Manchester to Plymouth. On the left is GW-built 4-6-0 'Manor' No. 7809 Childrey Manor, which was one of the first of the class withdrawn from Shrewsbury in April 1963. **John Whiteley**

'Warship' Livery Fact File

Number	Green	Green Yellow Panel	Green Full Yellow	Maroon Yellow Panel	Maroon Full Yellow	Rail Blue Yellow Panel	Rail Blue
D800	Jun-58	May-63	-	-	-	-	-
D801	Sep-58	Feb-62	-	Jun-66	-	-	-
D802	Dec-58	May-62	-	Apr-66	-	-	Oct-67
D803	Mar-59	Feb-65	-	-	-	-	Nov-67
D804	Apr-59	Dec-62	-	-	-	-	Nov-67
D805	May-59	May-63	-	Jan-66	Feb-68	-	Oct-70
D806	Jun-59	Mar-62	-	Jun-66	Jan-68	-	Mar-71
D807	Jun-59	Apr-63	-	-	-	-	Nov-67
D808	Jul-59	Mar-62	Dec-67	-	-	-	Jul-68
D809	Aug-59	Mar-63	-	Mar-66	Mar-68	-	-
D810	Sep-59	Sep-62	Jan-68	-	-	-	Apr-70
D811	Oct-59	Sep-62	-	Nov-65	Aug-67	-	Jan-70
D812	Nov-59	Apr-62	-	Dec-65	Apr-68	-	Mar-70
D813	Dec-59	Apr-63	-	Nov-65	-	-	Jul-67
D814	Jan-60	Feb-63	-	-	-	-	Aug-67
D815	Jan-60	Nov-62	-	Aug-66	Jan-68	-	-
D816	Feb-60	Feb-62	-	-	-	-	Sep-67
D817	Mar-60	Mar-63	-	Sep-66	Dec-67	-	-
D818	Mar-60	Mar-63	-	-	-	-	Jun-67
D819	Apr-60	May-63	-	-	-	-	May-67
D820	May-60	Jan-62	-	-	-	-	Jul-67
D821	May-60	Feb-64	-	May-66	-	-	Jan-68
D822	May-60	Jan-62	-	-	-	-	Mar-68
D823	Jul-60	Apr-63	-	May-66	May-68	-	Sep-69
D824	Jul-60	May-62	-	-	-	-	Apr-69
D825	Aug-60	Mar-63	-	-	-	-	Nov-68
D826	Sep-60	Oct-62	-	-	-	-	Jan-68
D827	Oct-60	May-62	-	-	-	-	Aug-67
D828	Oct-60	May-62	-	Mar-66	-	-	Jul-69
D829	Nov-60	Sep-62	-	Dec-65	Jun-68	-	Oct-70
D830	Jan-61	Apr-62	-	-	-	Jan-67	Aug-67
D831	Jan-61	Jan-63	-	-	-	Nov-66	Mar-69
D832	Feb-61	Dec-62	-	Apr-66	Mar-69	-	Nov-70
D833	Jul-60	Jun-62	-	-	-	-	Sep-69
D834	Jul-60	Jan-62	-	Jun-66	Feb-68	-	Dec-70
D835	Aug-60	Jun-62	-	-	-	-	Mar-68
D836	Sep-60	Nov-62	-	-	-	-	Apr-68
D837	Nov-60	Jul-63	-	-	-	-	Jul-68
D838	Oct-60	May-62	-	Oct-66	Sep-68	-	-
D839	Nov-60	Aug-62	-	Feb-66	-	-	Jul-70
D840	Feb-61	Oct-62	-	Oct-66	-	-	-
D841	Dec-60	Sep-62	-	-	-	-	Sep-67
D842	Dec-60	Feb-62	-	Oct-66	May-68	-	Oct-70
D843	Jan-61	May-62	-	-	-	-	Feb-68
D844	Mar-61	Jul-62	-	Feb-66	-	-	Jan-71
D845	Apr-61*	Feb-64	-	-	-	-	Feb-70
D846	Apr-61	Sep-62	-	-	-	-	Apr-67
D847	Apr-61	Jun-62	-	-	-	-	Feb-67
D848	Apr-61	Mar-62	-	Jun-66	-	-	-
D849	May-61	Dec-62	-	-	-	-	Jul-67
D850	Jun-61	Feb-63	-	-	-	-	May-68
D851	Jul-61	May-62	-	-	-	-	May-68
D852	Jul-61	Jul-62	-	-	-	-	Nov-69
D853	Aug-61	Jul-64	-	-	-	-	Jul-67
D854	Sep-61	Apr-62	-	-	-	-	Dec-69
D855	Oct-61	Apr-62	-	May-66	-	-	Jan-70
D856	Nov-61	May-65	-	-	-	-	Oct-68
D857	Dec-61	Aug-62	-	Sep-65	Aug-62	-	Apr-67
D858	Dec-61	Jun-63	-	Oct-65	-	-	Oct-69
D859	-	Jan-62	-	-	-	-	Jun-67
D860	-	Jan-62	-	-	-	-	Feb-68
D861	-	Feb-62	-	Sep-66	-	-	Mar-71
D862	-	Mar-63	-	Nov-65	-	-	Apr-70
D863	-	Apr-62	-	Aug-65	-	-	Dec-67
D864	-	May-62	-	-	-	-	Nov-66
D865	-	Jun-62	-	Nov-65	-	-	Aug-69
D866	Mar-61	Dec-62	-	-	-	-	Sep-68
D867	Apr-61	Aug-62	-	Aug-66	-	-	Sep-70
D868	May-61	May-63	-	-	-	-	Dec-67
D869	Jul-61	Dec-62	-	Apr-66	Dec-69	-	Aug-70
D870	Oct-61	May-63	-	Dec-65	May-68	-	Oct-69

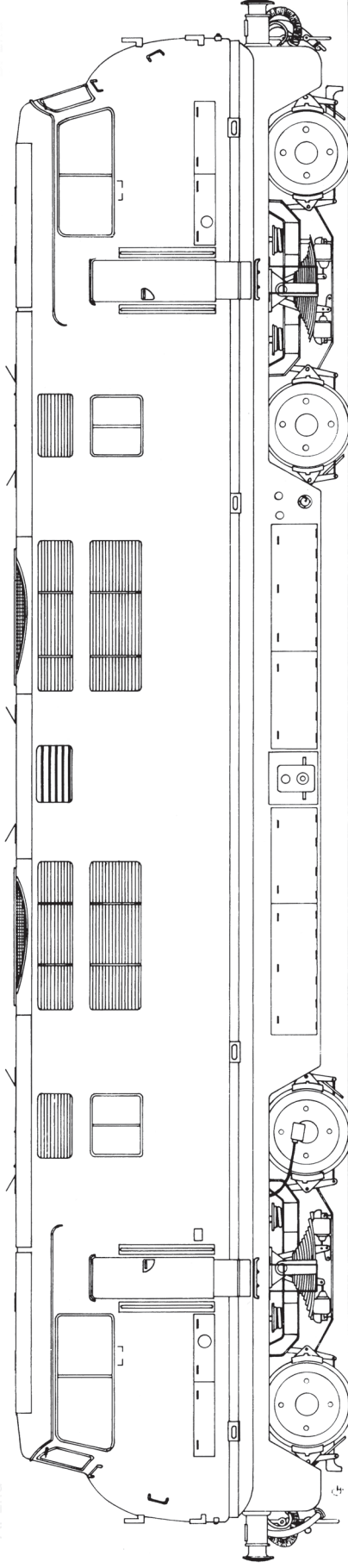
* Trial small yellow warning panel with white cab roof from Aug-61

No.1

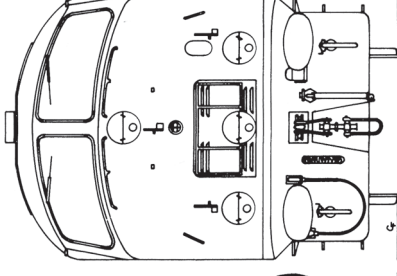


Class 42

No.2



No.3

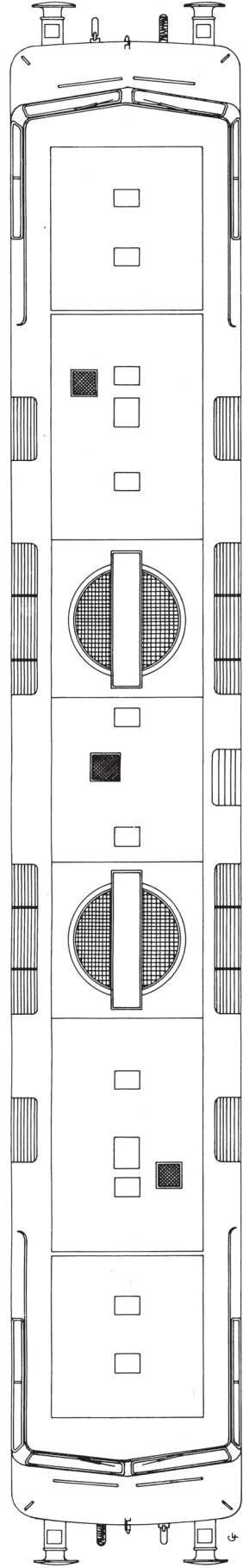


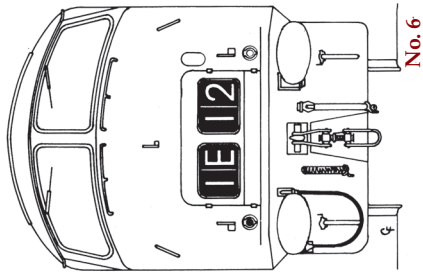
The drawings are reproduced in exact OO gauge 1:76 - 4mm to the foot scale

All: © Graham B. Fern. Additional line drawings of main line locomotives can be found in the Oxford Publishing Co book British Rail Main Line Diesel Locomotives - ISBN 0-86093-544-2

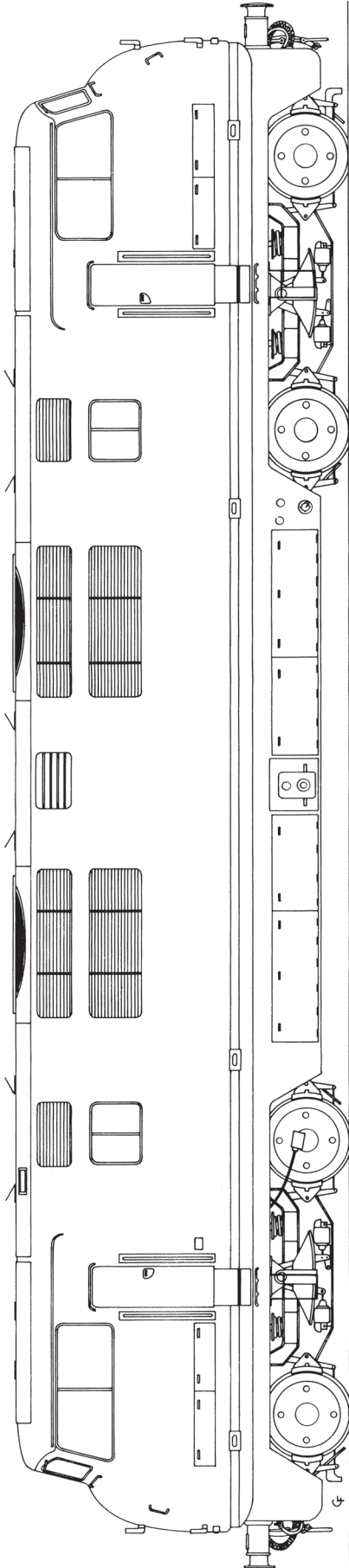
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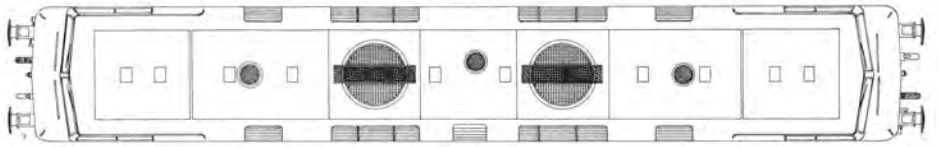


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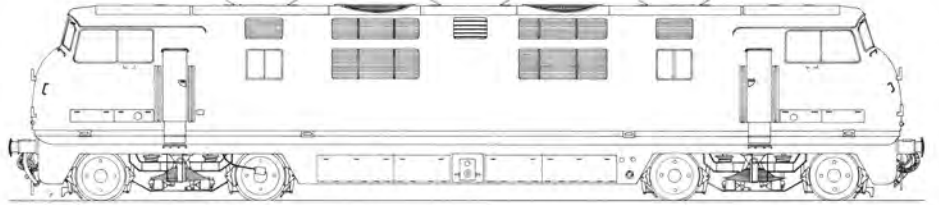


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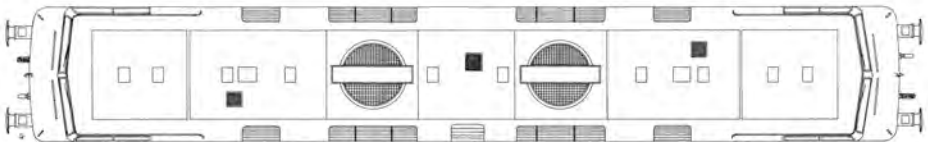


Class 42

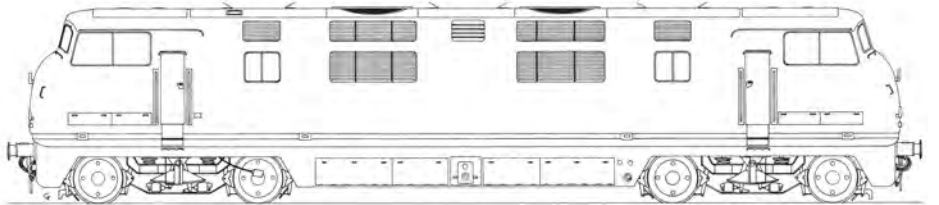
No.3



No.4



No.5



Class 43

No.6



The drawings are reproduced in exact N gauge 1:148 - 2.02mm to the foot scale.

1: BR Swindon-built 'Warship', later Class 42, roof elevation, applicable to Nos. D813-D829, D831-D832, D866-D870. 'A' end on left.

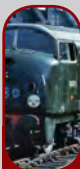
2: BR Swindon-built 'Warship', later Class 42, side elevation, applicable to Nos. D813-D829, D831-D832, D866-D870. 'A' end on left.

3: BR Swindon-built 'Warship', later Class 42, original front end design, applicable to locos D803-D812.

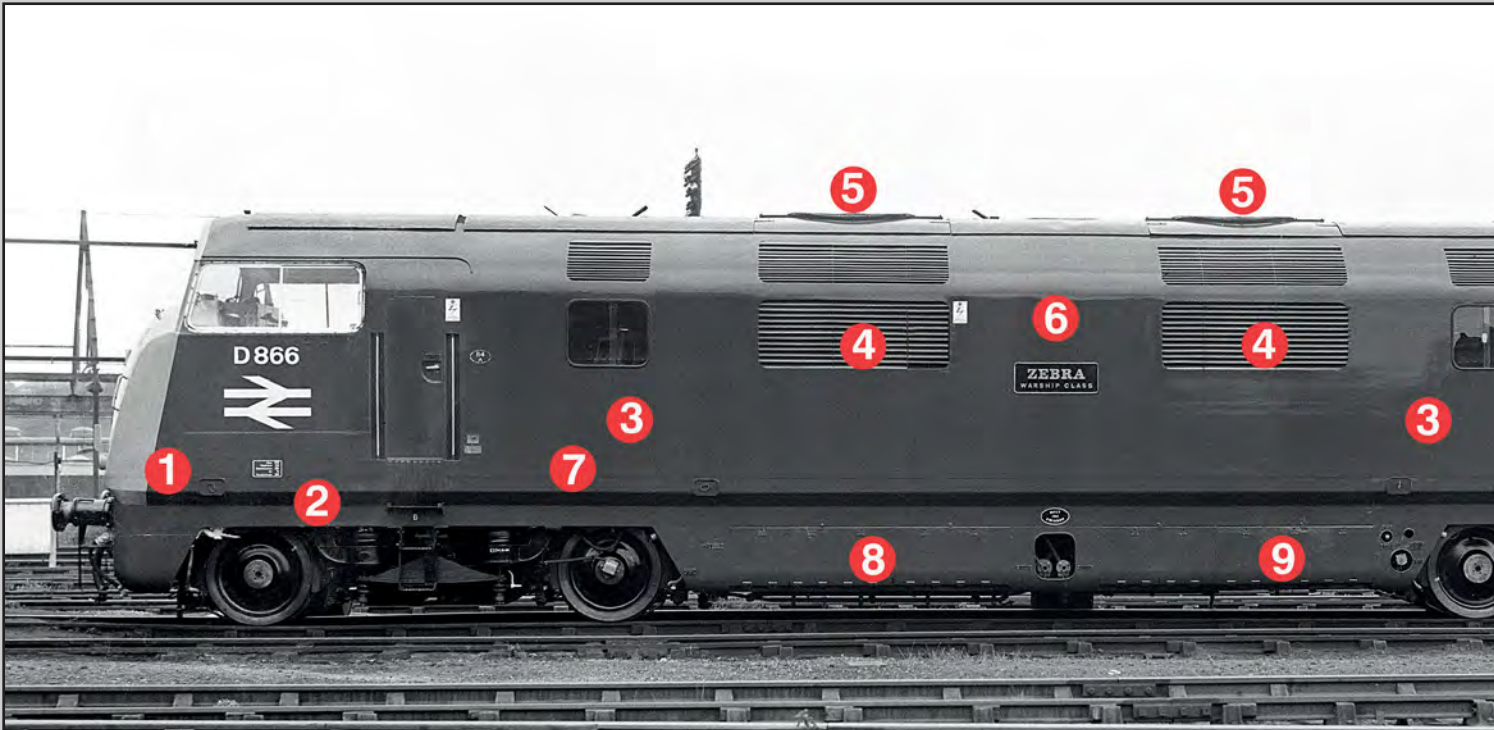
4: North British Loco Co built 'Warship', later Class 43, roof elevation.

5: North British Loco Co built 'Warship', later Class 43, side elevation, 'A' end on left.

6: North British Loco Co built 'Warship', later Class 43, front end elevation showing multiple control jumpers in position.



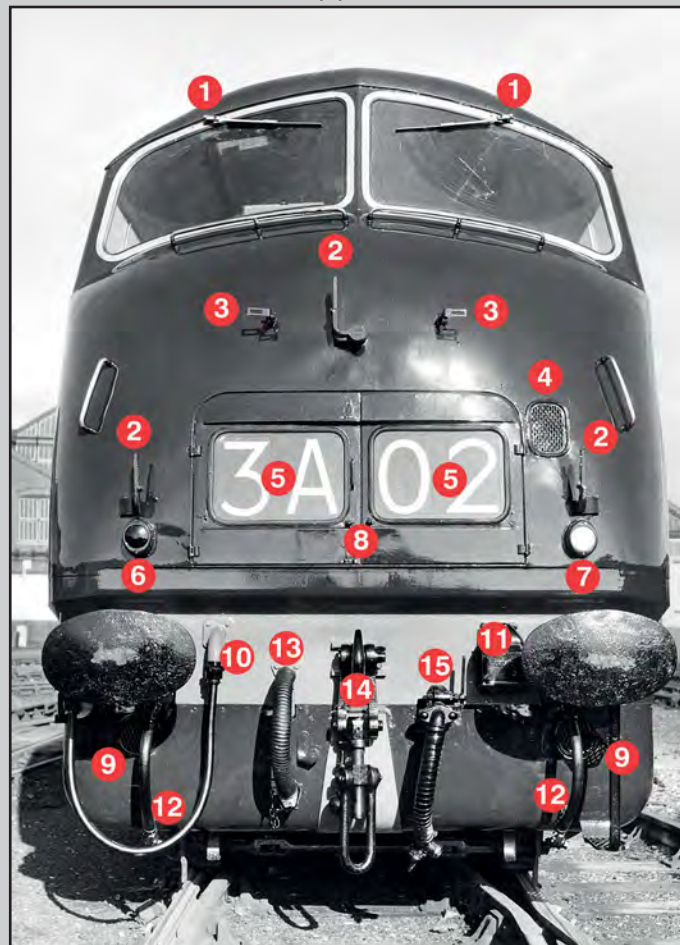
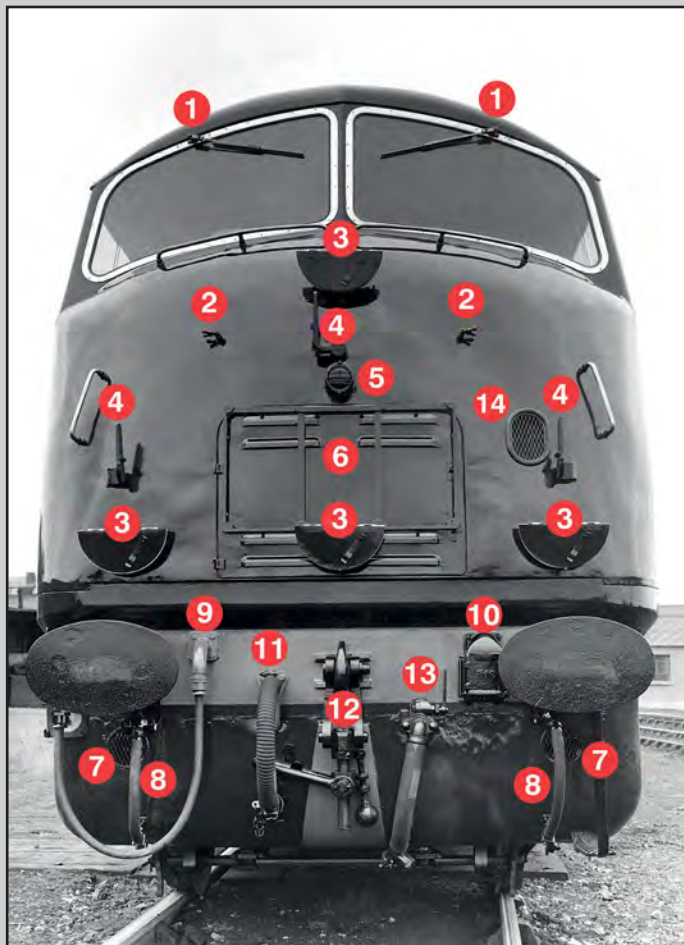
D800 Walkaround



Above: Production 'Warship' equipment positions. 1: Position of dyno starter, 2: Position of transmission, 3: Position of Engine, 4: Cooler group side grille, 5: Cooler group roof fan, 6: Position of train heating boiler, 7: Position of compressor and exhauster, 8: Fuel tanks, 9: Battery box. **CJM**

Below Left: 'Warship' front end equipment, original design. 1: Windscreen wipers, 2: Headboard bracket, 3: Hinged marker disc with light behind, 4: Lamp bracket, 5: Red rear marker light, 6: 'Slat' train reporting number frame, 7: Warning horn, 8: Engine control air pipe, 9: Multiple control jumper, 10: Multiple control jumper socket, 11: Vacuum pipe, 12: Coupling hook and shackle, 13: Steam heat pipe, 14: Ventilation grille. Loco shown No. D808. **CJM-C**

Below Right: 'Warship' front end equipment, Swindon modified style with route indicator. 1: Windscreen wipers, 2: Lamp bracket, 3: Headboard clips, 4: Ventilation grille, 5: Route indicator panel, 6: Red rear marker light, 7: White front marker light, 8: Hinged access doors, 9: Warning horns, 10: Multiple control jumper, 11: Multiple control jumper socket, 12: Engine control air pipe, 13: Vacuum pipe, 14: Coupling hook and shackle, 15: Steam heat pipe. Loco shown No. D816. **CJM-C**





Top: Removable master switch handle, cast in brass. **CJM-C**

Right Above: The production B-B 'Warship' design incorporated a much revised cab to the original A1A-A1A fleet, with a more conventional desk design. The power controller was to the right and the brake valves to the left with gauges and dials on an inclined front panel. Train heat controls were provided on the secondman's side, with circuit breakers mounted on the panel between the driving and non-driving position. The cab of North British No. D833 is illustrated. **CJM-C**

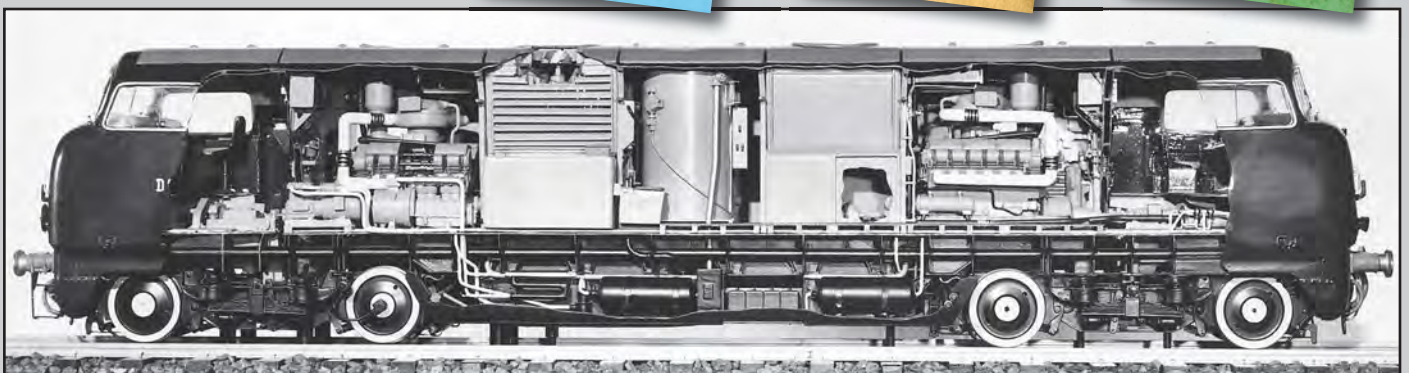
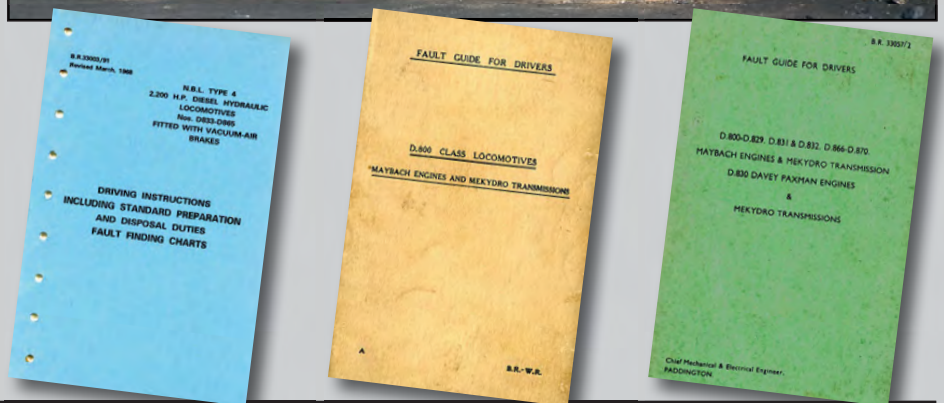


Right Middle: Detail of North British Loco Co bogie. Note the speedometer connection and mileage counter on the right axle head. **R. C. Riley**



Right: Selection of driver's manuals produced by the Paddington and Waterloo traction training schools for the 'Warship' fleet. **CJM-C**

Below: Cut-away model of a production 'Warship' as used at the Swindon driver training school, to illustrate component parts during the conversion training from steam to diesel traction. **CJM-C**





Early days of the D800s



Above: The second of the three prototype Swindon D800s No. D801 Vanguard, departs from Paddington past Westbourne Park on 13 August 1960. On the left is one of the 1500 class 0-6-0 GW Pannier tanks used for empty stock working in the Paddington - Old Oak Common area. **R. C. Riley**



Left: The pioneer of the production 'Warship' fleet, No. D800 Sir Brian Robertson approaches Cowley Bridge Junction, Exeter on 16 July 1958 bound for Paddington, carrying the special headboard "First 2,200HP diesel hydraulic locomotive built in British Railways Workshops - Swindon 1958". The headboard was carried between 14-17 July 1958 to mark the delivery of the first locomotive. **R. C. Riley**

With a rake of chocolate and cream Mk1s behind, Swindon 'Warship' No. D810 Cockade approaches West Drayton & Yiewsley with the down 'The Royal Duchy' on 21 November 1959, the loco having been delivered to Laira on 16 September of the same year. The first 13 production D800s from Swindon Nos. D800-D812 were originally fitted with 'slat' train reporting number stencil frames, which in this case were empty. **K. L. Cook / Rail Archive Stephenson**





Above: Passing Burlescombe station on the Exeter-Taunton section, close to where Tiverton Parkway station is today, Swindon-built No. D804 Avenger powers the 07.30 Penzance to Manchester express on 17 June 1959.
K. L. Cook / Rail Archive Stephenson

Right: The westbound 'Torbay Express', powered by No. D807 Caradoc hurries past the freshly cut harvest near Saverlake on 1 September 1962, the 'slat' reporting frame appears not to be in use.
Rodney Lissenden



Below: Passing below the long-closed and demolished private footbridge from the Dawlish Sea Wall to Sea Lawn Terrace, No. D800 Sir Brian Robertson heads the Paddington bound 'Cornish Riviera Express' through Dawlish station on 29 May 1959. At this time the loco was just eleven months old.
John Head / Rail Archive Stephenson

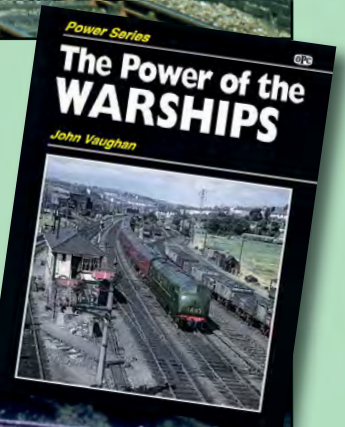
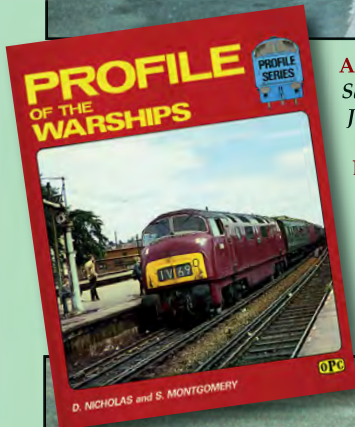




Above: The first of the production B-B build, No. D800 Sir Brian Robertson passes Savernake Low Level station with the 07.15 Plymouth to Paddington express on 13 June 13, 1959. **K. L. Cook / Rail Archive Stephenson**

Left and Right: Over the years some excellent books have been produced covering the 'Warship' classes. The Oxford Publishing Company 'Profile' and 'Power' series being some of the best.

Below: No. D801 Vanguard emerges from the western portal of Dainton tunnel between Newton Abbot and Totnes, with the down 'Cornish Riviera Express' on 3 June 1960. **John Head / Rail Archive Stephenson**





Above: Frequently, new locomotives which were commissioned at Swindon Works were used to power a Swindon-Paddington semi-fast morning service, returning west with an afternoon van train '3C05'. On 21 April 1960, brand new No. D819 Goliath heads towards West Drayton & Yiewsley station on the 'down' fast line. **K. L. Cook / Rail Archive Stephenson**

Below: Newton Abbot was one of the prime locations in the West Country to see and record all of the Western Region diesel-hydraulic classes. Adjacent to the station was a sizeable depot and workshops which over the years was one of the main servicing and repair depots for the production 'Warship' fleets. On 25 July 1962, No. D810 Cockade arrives at Newton Abbot powering the westbound 'Torbay Express'. On the left of the train one of the depots 0-6-0, later Class 08 shunting locos can be seen which would have been operating station pilotage duties. **John Whiteley**





Above: In addition to passenger duties, the B-B 'Warship' fleet operated freight traffic, frequently in Cornwall. Here on 20 July 1960, Swindon-built No. D816 Eclipse hauls a rake of china clay wagons at St Blazey. **R. C. Riley**



Left: One of the later-built Swindon locos, No. D867 Zenith stands at Exeter Central on 26 August 1961 with the diverted up 'Cornish Riviera Express' due to engineering work on the Western Region main line. **M. J. Fox / Rail Archive Stephenson**

Below: No. D817 Foxhound passes High Wycombe on 31 August 1962 powering the 07.30 Shrewsbury to Paddington express. **H. K. Harman / Rail Archive Stephenson**





Above: With a period mix of rolling stock, including BR Mk1 design vehicles and LMS stock, No. D827 Kelly slows for the station stop at Bodmin Road on 2 May 1961 with an inter-regional service bound for the Midlands. No. D827 was just seven months old when this image was recorded having been delivered on 4 October 1960 to Laira depot, being transferred in January 1961 to Newton Abbot depot. On the right of the loco, a sizeable clay siding can be seen, which is now part of the preserved Bodmin & Wenford Railway. **R. C. Riley**

Below: The unique No D830 Majestic, fitted with a pair of Paxman 12YJXL 'Ventura' engines, passes Cogload Junction nearing Durston north of Taunton on 17 August 1961 powering 'The Devonian' from Paignton bound for Bradford. The 'Warship' would have been replaced by either steam power or a diesel-electric at Bristol. **M. J. Fox / Rail Archive Stephenson**



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Above: Obviously involved in some form of test programme, North British No. D853 Thruster is seen at Laira depot coupled to the GWR dynamometer car, following a special run from Swindon to Plymouth via Bristol on 30 August 1961, the day on which the loco was officially allocated to Laira depot. **R. C. Riley**



Right Upper: A period view of Bodmin Road station taken on 11 July 1962. Heading towards Plymouth is 'Warship' No. D825 Intrepid in charge of the 11.00 Penzance to Manchester inter-regional express. On the right one of the NBL Type 2 diesel-hydraulic locos awaits departure with the branch line service to Bodmin General. **John Whiteley**

Right Lower: Passing near Sydney Gardens, Bath on 12 August 1961, NBL 'Warship' No. D844 Spartan heads train 2A70 a stopping service from Taunton to Paddington via Bristol and Bath, formed of two bogie vans and six passenger coaches. **CJM-C**



Below: Pulling out of the parcels platform at Paddington and past the then thriving Ranelagh Bridge motive power depot, used to service steam and diesel traction during London lay-overs. No. D825 Intrepid powers the afternoon Paddington to Plymouth vans on 27 August 1960, the loco having only been delivered to Laira depot for full service three days earlier. **R. C. Riley**





Yellow warning ends emerge



Still carrying its 'slat' train reporting system, but with a small yellow warning panel, No. D810 Cockade passes Cowley Bridge Junction, Exeter on 3 May 1964 with a westbound parcels train. The line diverging off to the left is the L&SWR route to Crediton, Barnstaple and Plymouth via Okehampton. The classic signalbox, which was captured in so many railway pictures over the years remained until replaced by the West of England re-signalling in 1985. **M. J. Fox / Rail Archive Stephenson**





Above: In the early 1960s when the Western Region was still operating steam traction on main line services, 'Warships' were provided as pilot power over the Devon banks on many occasions. In October 1962, the last of the North British locos No. D865 Zealous pilots a GWR 'Hall' over Dainton bank between Newton Abbot and Totnes. The use of just a single '0' in the route indicator is unusual. www.colour-rail.com

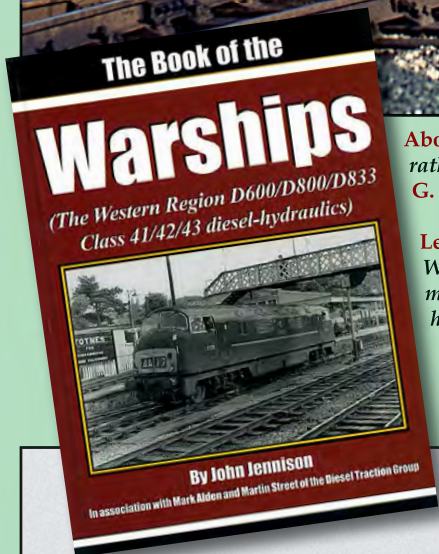
Left Above: Livery transition at Newton Abbot on 24 July 1962. On the left Swindon-built No. D822 Hercules awaits departure with an up milk train, while No. D832 on the right awaits station work to be completed with a Plymouth to Paddington express. No. D822 gained its yellow ends in January 1962, while No. D832 had to wait until December 1962 for the livery addition. **John Whiteley**

Below: Viewed from the road overbridge, Paxman-engine fitted No. D830 Majestic passes Burlescombe on the main line between Exeter and Taunton on 4 August 1962 with the 07.30 Plymouth to Paddington service. No. D830 was the lowest mileage 'Warship' only operating 447,000 miles during its entire life. **M. J. Fox / Rail Archive Stephenson**





Above: With the original broad gauge goods shed on the right, Swindon-built No. D822 Hercules, looking rather tatty on the front end, heads west through Taplow station on 19 October 1963.
G. S. Cocks / www.colour-rail.com



Left: By far the most authoritative publication covering the 'Warship' locomotives is 'The Book of the Warships' published by Irwell Press and written by John Jennison, Mark Alden and Martin Street. This is a must publication for anyone wanting to further their knowledge on the class and contains an excellent life history for each locomotive.

Below: North British No. D839 Relentless heads through Reading West station on 3 April 1965, hauling a westbound mixed freight consisting of 39 empty milk tanks and three vans. The six-wheel milk tanks would be heading for the milk processing plants in Devon and Cornwall. **Brian Stephenson**



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Above: Dozing under the amazing Brunel roof at Paddington station, No. D837 Ramillies rests after arrival with the 'Cornish Riviera Express' on 20 March 1965. The Austin A40 motor car to the right of the loco is also of historic significance! **Brian Stephenson**

Left Top: Another of the North British fleet, No. D855 Triumph, approaches Hayes & Harlington on the approaches to London on 19 October 1963, powering the up 'Mayflower' from Plymouth, sadly not carrying a cast headboard. **Brian Stephenson**

Left Middle: With the amazing railway landscape of Newton Abbot as a backdrop, No. D834 Pathfinder departs from the station on 25 August 1963 with an empty stock train. Today, the view from this vantage point shows just three tracks! **John Whiteley**

Left Below: Viewed looking west from the station footbridge at Totnes station, NBL No. D854 Tiger arrives at the station on 5 September 1963 powering the 07.30 Penzance to Paddington service. **John Whiteley**

Below: In the early views of the 1960s the NBL 'Warships' were frequently seen at Crewe while powering services to and from Bristol via Shrewsbury. In poor external condition with much of the paint and filler missing from the cabside, No. D840 Resistance departs from Crewe bound for Bristol on 29 April 1963. **M. H. Yardley** / www.colour-rail.com



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Above: Bristol Bath Road, together with Plymouth Laira, Newton Abbot and Old Oak Common in London were the main running sheds associated with the 'Warship' fleet. In this stunning view looking over Bristol Bath Road recorded on 12 July 1964, NBL 'Warship' No. D863 Warrior shares depot space with 'Peak' No. D22, three Type 3 'Hymek' diesel-hydraulic locos and a Brush Type 4. All are painted in green livery. www.rail-online.co.uk

Below: No. D845 Sprightly was chosen for the application of early design yellow warning panels in August 1961, when the door panels around the route indicator were painted light yellow and the area directly above the cab windows white. This livery variation remained until February 1964. On 22 September 1961, No. D845 passes Milton, west of Didcot with the 10.35 Weston-super-Mare to Paddington. **Mike Mensing**





Above: From the summer of 1964, the BR built 'Warships' took over the Waterloo-Salisbury-Exeter route, replacing Southern Region steam traction. The D800s were kept allocated to Newton Abbot and operated on an out and back basis, with service exams undertaken by fitting staff at Waterloo or any minor repairs undertaken by Stewarts Lane. An early 'Warship' on the Waterloo-Exeter route is No. D824 Highflyer, seen at Salisbury on 30 July 1964, hauling a rake of 'Southern' stock. www.colour-rail.com

Below: Swindon Works-built No. D868 Zephyr descends Bruton bank between Frome and Castle Cary on 23 May 1965 with a Paddington to West of England express. This loco retained its green livery up until BR rail blue was applied in 1967 and did not carry the attractive maroon Western Region passenger colour. **Brian Stephenson**





Above: A pleasing period image recorded at Wellington (Somerset) on 14 July 1964 and shows Swindon-built No. D823 Hermes hurrying through the station on the middle track with a London bound express, while an 0-6-0 pannier tank sits in the down west end bay. www.rail-online.co.uk

Right: Only two D800s carried green livery with full yellow warning ends, No. D808 Centaur between December 1967 and July 1968 and No. D810 Cockade between January 1968 and April 1970. On 29 June 1969, No. D810 is seen awaiting departure from Bristol Temple Meads with train 1V83, the 11.43 Liverpool Lime Street to Plymouth. **Bernard Mills**



Below: With a blue/grey liveried BG coupled behind, green full yellow end liveried No. D810 Cockade powers the 13.35 Weston-super-Mare to London Paddington at Bristol Temple Meads on 24 April 1968. In the background a green-liveried Swindon cross-country DMU can be seen. **Jim Binnie / www.dieselimagegallery.com**





The Maroon livery days



Above: The Western Region, always being that little bit different from other regions, opted for a deep maroon for its passenger diesel main line locos, applied to the 'Westerns' the livery was extended to the 'Warship' fleet from September 1965 when No. D857 emerged from Swindon. In ex-paint shop maroon, No. D821 Greyhound is seen at St Austell in May 1966 with a Penzance to Plymouth service. **C. Woodhead / www.colour-rail.com**

Below: Carrying maroon livery with small yellow warning ends, No. D867 Zenith operates in multiple with Green liveried with small yellow warning end No. D866 Zebra at Plymouth on 24 April 1968. The pair provide 4,400hp for the 08.30 service to London Paddington. **Jim Binnie / www.dieselimagegallery.com**





Above: The maroon livery of the D800s always looked at its best when hauling a rake of Southern green stock, as is the case here in summer 1967. Maroon No. D815 Druid passes through Clapham cutting, south of Clapham Junction, with the 11.00 Waterloo to Exeter service. **Brian Stephenson**

Right: Passing over electrified tracks, but before they were in use, No. D829 Magpie passes the semaphore signal gantry at Worting Junction in July 1965 with an Exeter bound service. The loco appears to be showing the wrong route indicator for this service. www.colour-rail.com



Below: Pushing back its train into Eastleigh depot yard, maroon-liveried No. D823 Hermes heads a freight on 7 March 1967. Although mainly used on passenger duties on the Southern, the 'Warships' were not uncommon on freight services. www.rail-online.co.uk





Above: One of the original three prototype D800 'Warships', No. D801 Vanguard, painted in maroon with small yellow ends, pulls away from Reading on 1 June 1968 powering the 10.00 Paignton to Paddington service.

Jim Binnie / www.dieselimagegallery.com



Left: This is what four years of work could do to the paint finish of a maroon 'Warship'. Painted into maroon in September 1966, No. D861 Vigilant pauses at Exeter St Davids on 13 June 1970 with the 13.30 Paddington to Penzance service. **Bernard Mills**

Below: With the old Basingstoke steam depot in the background, maroon-liveried No. D829 Magpie approaches Basingstoke on 27 September 1966 with an Exeter to Waterloo service. At this time, when 'Warships' were used on the L&SWR route, the service operated every two hours, from 06.00 in the morning until 19.00 at night. **Gavin Morrison**





Above: With a pair of green-liveried 4SUB EMUs on the 'up' main line approaching Clapham Junction through Clapham Cutting, maroon-liveried No. D802 Formidable heads west towards Earlsfield, with was has been identified as a Bournemouth line service on 7 July 1967. By this time the maroon livery on this example, which was only applied just over a year before looks to be very faded.
C. Gammell / www.colour-rail.com

Below: In immaculate maroon livery, BR Swindon-built No. D869 Zest pauses at Newton Abbot on 28 June 1966 with the up 'Devonian' service from Paignton to Bradford. **CJM**





Above: Traversing the old L&SWR route from Plymouth, 'Warship' No. D817 Foxhound calls at Tavistock North in February 1967 with the 10.40 Plymouth to Brighton service. **Bernard Mills**



Left: With all its 2,200hp (1,641kW) applied to the rail, No. D829 Magpie pulls away from Sidmouth Junction station on 15 October 1966 with the 14.20 Exeter St Davids to Waterloo service. **Bernard Mills**

Below: With the L&SWR line diverging in the left foreground, No. D839 Relentless approaches Devonport Junction on 7 March 1968 with the 07.30 Penzance to Paddington formed of a mix of maroon and blue/grey Mk1s. **Bernard Mills**





Above: Between August 1967 and December 1969 15 'Warships' in maroon livery were given full yellow warning ends, these are detailed in the livery fact file on page 21. This near broadside view of Swindon-built No. D815 Druid shows how the yellow and maroon joined in a slight wrap around on the cab side. This view of No. D815 was recorded at Newton Abbot on 8 July 1969. www.colour-rail.com



Right Middle: When built, the final member of the Swindon batch, No. D870 Zulu has its warning horns repositioned from below the buffer beam to the roofline, located behind a wire mesh in the centre above the cab windows. This modification was carried out, as at the time the BTC had plans to equip this loco with electric train heat, and the ETH jumpers would require the space where the horns were usually positioned on the buffer beam. The project was never furthered, but No. D870 retained roof mounted warning horns through its life. On 29 June 1969, No. D870 is seen at Bristol Temple Meads. **Norman E. Preedy**



Right Below: By the early 1970s, the remaining maroon 'Warships' were looking in a very dilapidated condition, with faded yellow ends and patched bodywork, where filler had been applied to fill rust spots and painted over with a close colour. Looking well work stained, No. D806 Cambrian is seen at Exeter St Davids on 9 July 1970. In March 1971 the loco was repainted in rail blue during an intermediate overhaul at BREL Swindon. The loco was withdrawn on 1 November 1972. **Norman E. Preedy**



Above: Awaiting the signal in platform 3 at Exeter St Davids, No. D817 Foxhound heads a rake of blue and grey-liveried Mk1s with the 10.15 service to London Waterloo on 22 May 1971.
Norman E. Preedy



Left: Departing from Gloucester Eastgate station and passing Barton Street crossing, No. D844 Spartan heads towards Bristol on 2 April 1970.
Norman E. Preedy

Below: With a North British Type 2 Class 22 behind, Swindon 'Warship' No. D832 Onslaught poses on shed at Gloucester Horton Road on 29 April 1970. This loco is now preserved and after a long period on the West Somerset Railway will be returning to the East Lancs Railway in 2016.
Norman E. Preedy / www.dieselimagegallery.com





Above: With the Tamar suspension bridge in the background, NBL No. D838 Rapid crosses the Royal Albert Bridge at Saltash on 11 May 1969 in charge of the 06.50 Bradford to Penzance service. **Bernard Mills**

Right: In the company of a two-tone green 'Hymek' and a blue with small yellow end painted 'Western', 'Warship' No. D870 Zulu poses outside Bristol Bath Road depot in 1969. **J. L. Champin / www.colour-rail.com**



Below: In need of some serious tender loving care, a pair of maroon with full yellow end liveried Class 42s Nos. D829 Magpie pilots D823 Hermes away from Paddington on 1 June 1968 with the 08.30 departure to Penzance, this was during the period that pairs of 'D800s' were used on the fastest services. **Jim Binnie / www.dieselmagegallery.com**





The era of Corporate Rail Blue



Above: From the end of 1966 full repaints of 'Warship' locos saw BR rail blue applied. two examples D830 and D831 carried rail blue with small yellow warning panels, while the remainder were painted in rail blue with full yellow ends. No. D831 Monarch passes Pirbright Junction in January 1968 showing the small yellow panel style powering a Waterloo to Exeter service. [T. Owen / www.colour-rail.com](http://www.colour-rail.com)

Below: All but eight 'Warships' carried corporate rail blue with full yellow ends, applied in two different styles, either with a BR arrow logo on each cab side or centrally placed below the nameplate on each side. No. D849 Superb approaches Hollacombe between Paignton and Torquay on 22 July 1967 with 'The Devonian' service from Paignton to Bradford. www.rail-online.co.uk





Above: Working in multiple, blue liveried Class 42s Nos. D803 Albion and D804 Avenger approach Reading on 1 June 1968, working train 1C45 the 10.30 Paddington to Penzance approaching Reading station.
Jim Binnie / www.dieselimagegallery.com

Right: With a central double-arrow logo below its nameplate, No. D855 Triumph shunts at Hayle Wharf, Cornwall on 13 August 1971.
M. H. Yardley / www.colour-rail.com



Below: A whisp of steam emitting from the nose end and between the coaches indicated the Stones train heat boiler was working on NBL No. D837 Ramillies. The loco is seen resting by the buffers at Paddington on 6 February 1970.
Norman E. Preedy





Above: Passing the storage sidings west of Pinhoe, near Exeter, Class 42 No. D810 Cockade powers train 1012, the 12.30 Exeter St Davids to Waterloo on 14 September 1971. **Bernard Mills**



Left: With a 'Peak' stabled on the left side, 'Warship' No. D858 Valorous departs from Gloucester Eastgate on 29 April 1970, heading towards Bristol. **Norman E. Preedy**

Resting at the North Devon seaside town of Ilfracombe, rail blue-liveried No. 803 Albion, awaits departure for Barnstaple and Exeter in the period immediately prior to line closure on 3 October 1970. This locomotive, from December 1968 operated without a 'D' prefix to its running number. www.colour-rail.com





Above: Also devoid of a 'D' prefix to its running number, No. 807 Caradoc passes Teignmouth station on 1 September 1972, right at the end of the 'Warships' daily operation. The loco is powering a short freight from Tavistock Junction to Exeter Riverside formed of some clay wagons and five Motorail flats. This loco is one of those devoid of its center lamp bracket and headboard clips. **Gavin Morrison**

Right: Exeter depot, located adjacent to Exeter St Davids station was always a hub of activity with examples of all the diesel-hydraulic classes and many diesel-electric fleets usually present. On 22 May 1971 Nos. D866 Zebra and D814 Dragon share depot space. The route indicators reveal D866 was off a freight duty, while D814 had operated over the Barnstaple branch. **Norman E. Preedy**





Above: From 1964 until replaced by Class 33s in 1971, 'Warship' locos could usually be found stabled around Waterloo station, either resting between duties in the north sidings or in the docks between platforms 11 and 12. In early 1970, No. 824 Highflyer stands in the coal road of the North sidings carrying the route indicator for the 19.00 Waterloo to Exeter service. www.rail-online.co.uk



Left: Milk traffic from Cornwall, Devon and Somerset to the London area was often powered by the 'Warship' fleet. With a short rake of half a dozen six-wheeled milk tanks behind, No. 811 Daring passes Burngullow Junction on 13 September 1971 with a train from the milk processing plant at St Erth. The line of the right, diverges to Drinnick Mill. **Bernard Mills**





Above: In June 1971, Swindon-built No. 825 Intrepid stands in platform 4 at Exeter St Davids, after arrival of the 13.00 service from Waterloo. This locomotive, introduced on 24 August 1960 and finally withdrawn on 23 August 1972 at the age of just 13 years clocked up some 1,014,000 miles. **Norman E. Preedy**

Right Middle: Heading west at Devonport Junction, where once the L&SWR line diverged on the right, Swindon-built 'Warship' No. 806 Cambrian leads train 1V72, the 07.35 Leeds to Penzance on 26 September 1972. The 'Warship' is likely to have taken this train over at Bristol Temple Meads, relieving from a 'Peak' or 'Brush Type 4'. On some occasions loco exchanges were also undertaken at Plymouth. **Bernard Mills**



Left Below: Recorded from 40 Steps bridge, just west of Taunton station, a rare diesel-hydraulic / diesel-electric pairing is seen in the form of 'Warship' No. D851 Temeraire piloting 'Brush' Class 47 No. D1600. The pair are in charge of the Paignton to Bradford 'Devonian' service. **Bernard Mills**



Right Below: From the summer of 1968, the Western Region Board wanted to accelerate the West of England schedules between Paddington and Exeter, Plymouth and Penzance. To do this they needed greater power and this was achieved by refitting the multiple control equipment to a number of Swindon-built locos to allow double-heading under the control of one driver and provide a traction package of 4,400hp (3,282kW). In November 1969, Nos. D824 Highflyer and D808 Centaur pass Doublebois on the climb away from Bodmin Road, powering the 11.25 Penzance to Paddington 'Cornish Riviera Express' working. **Bernard Mills**

With a milk train bound for Chard Junction, No. 824 Highflyer passes Exeter Middle signalbox on 21 June 1972 and heads towards Exeter St Davids station. This loco remained in traffic until 1 December 1972.
www.rail-online.co.uk



Left: In recent times on British Railways there have been few occurrences of mixed passenger and freight formations. One which did remain until the 1970s was on the Barnstaple line in Devon. On 10 July 1971, 'Warship' No. D868 Zephyr calls at Lapford with the mixed passenger and milk 17.55 Barnstaple to Basingstoke. Forward from Exeter St Davids the train was passenger only. **Bernard Mills**



Below: Between April and August 1971, No. 821 Greyhound spent 126 days receiving attention at BREL Swindon Works, which included a repaint into rail blue. This was the view in Swindon 'A' shop on 16 June 1971. On the left is fellow 'Warship' No. D818 Glory.
Jim Binnie / www.dieselmagegallery.com





Above: Taken from the King's Walk, Dawlish, looking towards Kenmarway Tunnel, No. 824 Highflyer powers an up ballast train from Stoneycombe to Exeter on 10 June 1969. Only two months before this loco had received classified attention at BREL Swindon including a repaint from maroon to rail blue.

J. Sansom / www.colour-rail.com

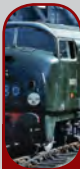
Right: Painted in rail blue with BR double arrow logos below the cab side windows, No. D804 Avenger passes Gloucester Central on 17 September 1969, while working a parcels service.

Norman E. Preedy / www.dieselimagegallery.com

Below: Standing at the old Reading station, totally unrecognisable from the modern structure we see today, Class 42s Nos. D826 Jupiter pilots No. D868 Zephyr with train 1A27 the 06.30 Penzance to Paddington on 1 June 1968.

Jim Binnie / www.dieselimagegallery.com





L&SWR to the West Country



Above: From the summer of 1964 the Swindon-built D800s became the booked power for the Waterloo- Salisbury - Exeter route, replacing Southern steam traction. The 'Warships' were not transferred to the Southern, remaining allocated to the Western Region at Laira and Newton Abbot, full maintenance was the responsibility of the Western Region, with daily service exams undertaken by diesel-hydraulic trained fitting staff on the Southern Region. Any major problems encountered while at the London end of the 'Southern' saw the locos transferred to Old Oak Common and a replacement provided. It was rare but not unknown for the North British-built D833 fleet to operate on the Southern route. Green-liveried No. D814 Dragon, passes Woking Junction with the 07.17 Yeovil Junction to Waterloo on 13 September 1964. **Brian Stephenson**

Below: Passing the wonderful Southern-design, platform-mounted Templecombe signalbox, green-liveried No. D818 Glory, arrives at Templecombe station on 4 September 1966 with an Exeter St Davids to Waterloo service. **Gavin Morrison**





Above: Passing Woking Junction, south of Woking station, where the Guildford line diverges from the L&SWR main line, and passing the huge yard complex on both sides of the main line, 'Warship' No. D829 Magpie powers the 11.00 Waterloo to Exeter St Davids on 13 September 1964. The L&SWR main line was four track section through to Worting Junction and was arranged with the fast lines in the middle of the formation and the slow tracks on the side. **Brian Stephenson**

Below: The location where the author first saw the D800s at work, Surbiton, some 12 miles from London Waterloo. Here, the '800s' would pass roughly every two hours in each direction and were the highlight of 'train spotting' days. Maroon-liveried No. D805 Benbow hurries south on the main line at Surbiton in summer 1965 with a Waterloo to Exeter service. **W. J. Verden Anderson / Rail Archive Stephenson**





Above: Dozing in platform 14 at London Waterloo, green-liveried No. D816 Eclipse waits to head west with the 18.00 service to Exeter St Davids on 30 August 1964. **Brian Stephenson**

Right Top: As steam traction was still prevalent in the area, a steam locomotive water crane was located on the west end of the down main platform at Basingstoke, when this illustration was taken on 27 June 1966. In the platform is green-liveried No. D829 Magpie heading for Salisbury and Exeter. **Gavin Morrison**

Right Middle: About to dive below Battledown Flyover at Worting Junction, where the Salisbury line diverges from the main line to Southampton, Class 42 No. D812 Royal Naval Reserve 1859 - 1959 powers the 11.08 Waterloo to Exeter St Davids on 25 August 1971. **Bernard Mills**

Right Bottom: Identifiable as No. 870 Zulu, by its roof mounted air horns, the loco is seen awaiting departure from platform 3 at Exeter St Davids on 29 May 1971 with train 1012, the 12.15 to London Waterloo. **Norman E. Preedy**

Below: Green-liveried No D831 Monarch stand below the wonderful bracket signal mid-way along Exeter Central station on 19 May 1963 with the 12.00 Plymouth to Waterloo service. **M. J. Fox / Rail Archive Stephenson**







D800s On Shed

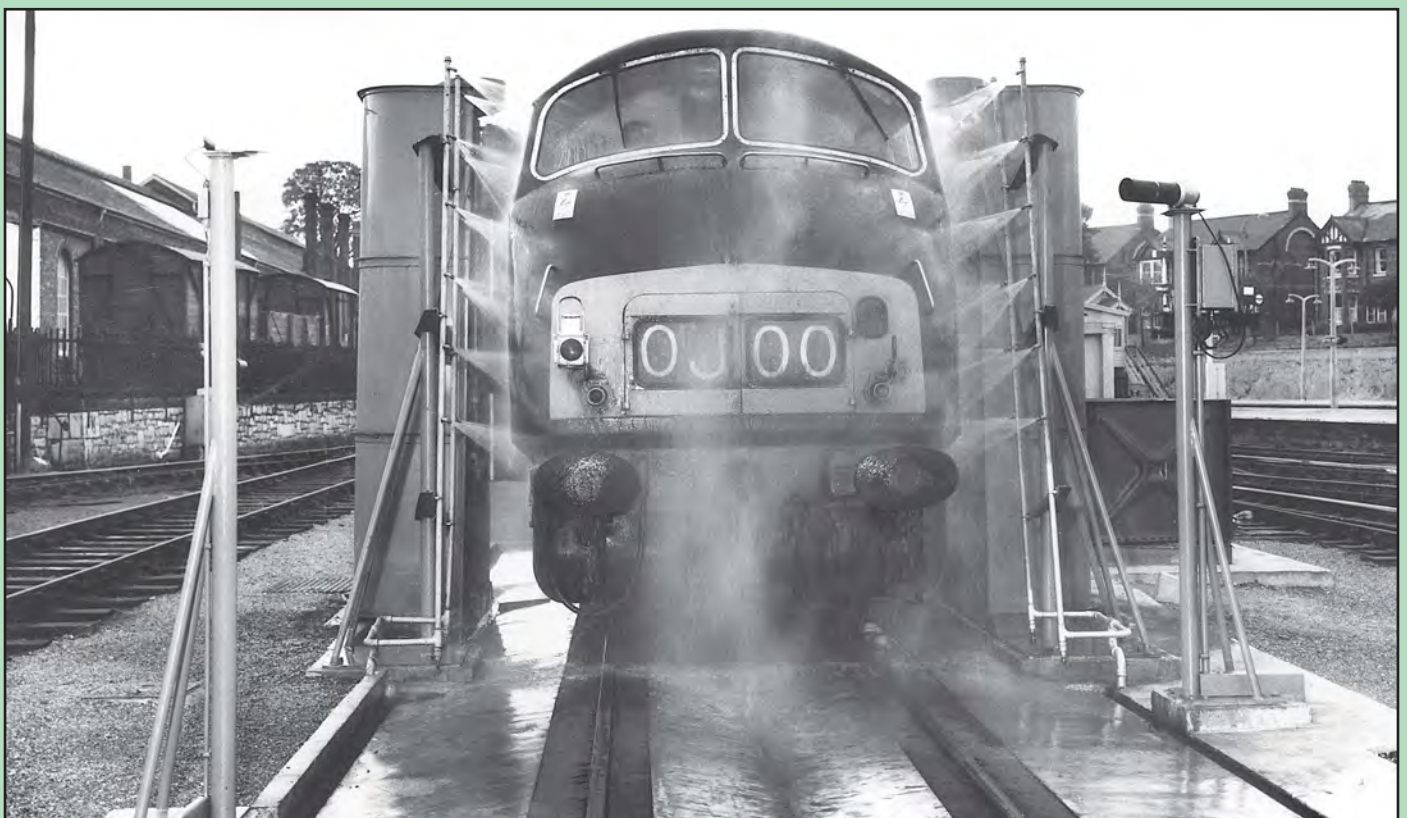


Above: With the exception of No. D830, all 'Warships' were allocated new to Plymouth Laira. Here on 30 April 1961, immaculate No. D823 Hermes poses outside the old shed with a NBL Type 2. **R. C. Riley**



Left: In later years Old Oak Common became home for a number of 'Warships' and in this view, recorded on 1 May 1966, NBL No. D835 Pegasus is seen outside Old Oak Common in company with a 'Western' Type 4. www.rail-online.co.uk

Below: The presentation of the Western Region rolling stock fleet was always important and mechanical washing plants were built at the main depots, where high-pressure water and cleaning fluid could be sprayed on a locomotive and rotary brushes used to scrub the body clean, frequently also removing the paint. The washer at Newton Abbot is illustrated with a NBL loco receiving attention. **CJM-C**





Above: Newton Abbot was a very important facility for the maintenance of the 'Warship' fleet, with the depots adjacent workshop carrying out many classified and casual repairs. Four class members are seen inside the factory in this early 1962 view. **CJM-C**

Right: Another depot where 'Warships' could always be found was Bristol Bath Road, which could easily be viewed from the end of the platform. In 1971, Swindon Nos. 869 Zest and 867 Zenith share depot space with a Class 08. **Jim Plant / www.dieselimagegallery.com**



Below: Gloucester Horton Road depot was another popular haunt for the 'Warships' and for that matter all the hydraulic classes. On 10 March 1970, Class 43 No. 845 Sprightly is stabled alongside a Class 52 'Western' at Gloucester Horton Road MPD. **Norman E. Preedy / www.dieselimagegallery.com**





'Warships' in Preservation



Above and Left: A locomotive that was 'preserved but not preserved'. After withdrawal on 31 October 1972, No. D818 Glory was dumped at Laira depot. It was transferred to BREL Swindon in April 1973, but rather than be scrapped as the rest of the fleet is was stabled near the works turntable, where it became something of a celebrity. Its official role was to supply spare parts to No. D832 which was taken over by BR Research. Although repainted firstly in BR blue and then green with a yellow warning panel the loco was little more than a shell. In the above view the loco is seen in immaculate BR rail blue in 1975. While the view left, recorded just a year later, shows the paintwork fading and by now in company with preserved 'Hymek' No. D7029. Sadly, after the announcement that BREL was closing its Swindon factory the loco was broken up in October 1985. Both: **CJM**



Left Below: After withdrawal at Laira depot on 16 December 1972, Swindon-built No. D832 Onslaught was claimed by BR Research at Derby, where it arrived on 10 January 1973. After a period at the Railway Technical Centre it was transferred as a dead load vehicle to the Old Dalby test track near Melton Mowbray, where it was used in autumn 1974. After the work was completed the loco was hauled to Eggington Junction and stored, together with two 'Hymeks' and a 'Clayton', where this view was taken from a passing train in summer 1977. In summer 1979 the loco was purchased by a group and eventually moved the remains to Derby for storage and subsequently Horwich for restoration, before being based for many years on the East Lancs Railway fully operational. **CJM**

Right Above: After its testing days were over working with BR Research at the Old Dalby test track, No. D832 was returned to the RTC before moving to Eggington Junction. The shell is seen stabled at the RTC Derby in August 1975. **CJM**



Right Middle: Back in 1972 two ever popular enthusiasts Chris Reid and Colin Massingham attempted to purchase NBL Type 2 No. D6319 from BR. Sadly during the purchase process, Swindon broke the loco up and in lieu, the pair were offered a 'Warship' No. D821 instead. At the time the loco was at Laira, where some minor attention was carried out prior to it running under its own power from Laira to Didcot Railway Centre on 23 May 1973. After a period stored at Reading gas works, No. D821, along with 'Hymek' No. D7029 was transferred to Swindon Works where restoration could commence and it was soon joined by 'Western' No. D1015. This view, taken on 8 May 1977 shows No. D821 Greyhound and D1015 Western Champion stabled around the Swindon Works turntable. **CJM**



Below: On 16 April 1981 the locos, then owned by the Diesel Traction Group, were transferred to the North Yorkshire Moors Railway (NYMR) where the 'Warship' was restored to full working condition. The loco remained at this location for over 10 years. On the NYMR the 'Warship' was restored to maroon livery with a yellow warning panel and given a number of running turns. Powering a rake of blue/grey Mk1s, the loco is seen passing Darnholme on 23 April 1988. **Gavin Morrison**





Above: With a matching rake of maroon-liveried Mk1s behind, the immaculately restored No. D821 Greyhound approaches Goathland with a train from Pickering to Grosmont on the North Yorkshire Moors Railway on 2 September 1982. **Brian Stephenson**



Left: In the 1990s when a spate of depot and yard open days were held throughout the country 'Warship' No. D821 Greyhound was made available to attend a large number. On 30 April 1994 the loco made a return to its old stamping ground when it visited the Exeter Railfair held in Exeter Riverside yard to celebrate the 150 years of rail services to Exeter. The loco was restored to mid 1960s BR green livery with a small yellow warning end. **CJM**

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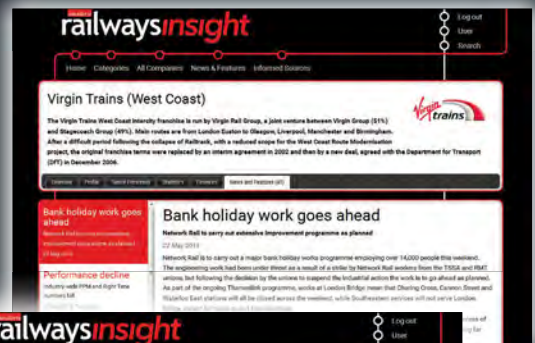
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Above: Although non-authentic for this locomotive, the BR rail blue with small yellow panel colour was applied to D821 to demonstrate how the livery looked. In the 1960s, this scheme was only applied to Nos. D830 and D831. On 27 April 1991, No. D821 passes Darnholm on the North Yorkshire Moors Railway powering a rake of blue and grey Mk1s as the 09.00 Grosmont to Pickering. **Bill Atkinson**

Below: After taking part in a well attended open day at Laira depot in September 1991, when D821 shared depot space with a 'Hymek' and five 'Westerns', the 'Warship' received wheelset attention on the Laira wheel lathe, which at the time was more used to dealing with HST power cars. On 28 September 1991 No. D821 still carrying its blue with small yellow warning end livery sits straddling the lathe, while a Class 43 power car stands behind about to be lifted. **CJM**





Above: In summer 1990 a little fun was had by the Diesel Traction Group, when they repainted No. D821 into Deutsche Bundesbahn livery and renumbered it as V200 021 with the nameplate Doppelganger. Even the front end was modified to resemble the German loco! No. V200 021 is seen at Grosmont shed on 7 July 1990. **Paul Winter**



Right: From late 1994, the Diesel Traction Group 'Warship' was transferred to the Severn Valley Railway, where it operated for many years as part of the lines diesel fleet. In recent years the loco has been transferred to GWR Old Oak Common depot for attention. On 30 April 2011 No. D821, by now painted in maroon with small yellow ends is seen with the SVR-based GWR observation saloon. **Phil Barnes**



As part of the 2010 diesel gala held on the West Somerset Railway, No. D821 Greyhound visited the line and operated alongside then resident 'D800' No. D832 Onslaught. Both painted in maroon, but with No. D832 showing signs of 'weathering' and a full yellow end. In this view, the pair are seen departing from Blue Anchor in charge of the 13.00 Bishops Lydeard to Minehead. **Lindsay Atkinson**



Above: After No. D832 was saved by preservationists at Derby, the loco was transferred to Derby Works in June 1979 and later to BREL Horwich before that site closed. Considerable restoration was done to the loco while at Horwich. For the 1980 open day, the loco was exhibited in BR green livery with a small yellow warning panel, although its shape was slightly incorrect. **Tom Heavyside**

Below: Soon, No. D832 Onslaught was moved to the East Lancs Railway where further restoration work was undertaken, including for a period the loco emerging in non-authentic BR black livery, showing how the loco might have looked if black had been retained as the livery for main line diesels. In BR black, No. D832 approaches Irwell Vale on 26 March 1994 powering the 12.00 Rawtenstall to Bury. **Tom Heavyside**





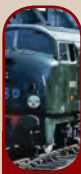
Above: Between 2010-2016, the Bury Hydraulic Group-owned No. D832 was on extended loan to the West Somerset Railway where considerable restoration work was undertaken. Painted in grey undercoat the loco is seen departing from Williton bound for Bishops Lydeard on 11 June 2011. **Brian Garrett**

Right: After a period in maroon livery, No. D832 was painted in BR green with a small yellow warning panel and looked immaculate. Carrying an incorrect headcode for a freight train, the loco pulls away from Williton on 6 June 2015 with the 09.00 Bishops Lydeard to Minehead unfitted freight. **Antony Christie**



Below: With haulage enthusiasts enjoying the ride, No. D832 Onslaught passes near Doniford on 6 June 2015 in charge of the 16.56 Norton Fitzwarren to Minehead passenger. **CJM**





'Warships' – End of the Road



Left: The entire fleet of North British Loco A1A-A1A locos were withdrawn from Laira depot on the last day of 1967. The locos lay dumped around Laira shed until July 1968 when all were sold for scrap. Nos. D600 and D601 being sold to Woodhams of Barry and Nos. D602-D604 to J Cashmores of Newport. No. D604 Cossack fitted with split two-section route indicators is seen stabled at Laira on 24 April 1968 awaiting disposal.
Jim Binnie / www.dieselimagedallery.com

Right: The two locos sold to Woodhams of Barry, South Wales arrived at the scrap yard on 28 July 1968 and were dumped in the huge yard alongside hundreds of steam locos still awaiting disposal. The two 'Warships' in gradually decaying condition remained at the yard until March 1970 when No. D600 was broken up. No. D601 remained semi intact for another 10 years, being finally broken up in June 1980. **Peter Foster**



Below: Amongst heaps of twisted metal, much coming from broken up steam locomotives, the cutting gang dispose of No. D602 at Cashmores yard in Newport on 22 August 1968. Apart from the bogies and frame little remains, and it was only hours that this was hacked apart to join the heap of metal awaiting reprocessing.
John H. Bird





Above: Stripped of their nameplates Class 43s Nos. D837 Ramillies and 843 Sharpshooter stand in the yard at Newton Abbot depot on 16 May 1971, although they were not officially withdrawn until 22 May. No. D837 subsequently was transferred to Laira for parts recovery in August 1971 and then transferred to Swindon Works for disposal in October of the same year. No. 843 was moved to Marsh Junction, Bristol in October 1971 and then to Swindon the following December.

Norman E. Preedy / www.dieselimagegallery.com

Right Upper Middle: Looking very decrepit with its cab window frame removed, maroon-liveried No. D862 Viking is seen stored at Newton Abbot depot on 22 February 1970. This loco was subsequently hauled to Swindon Works and given an intermediate overhaul, returning to the main line on 27 April 1970 painted in rail blue with full yellow ends.

Jim Binnie / www.dieselimagegallery.com



Right Lower Middle: The 'Warship graveyard' at BREL Swindon. Together with the vast majority of 'Westerns' and 'Hymeks' the 'Warships' were disposed of at Swindon. Good parts were removed in the main shop and the body sections taken to the far west end of the site for disposal. Here one cab from No. D834 Pathfinder awaits cutting in February 1972.

www.colour-rail.com

Below: With North British-built No. D857 Undaunted nearest the camera a line of six withdrawn 'Warships' await their fate in the cutters yard at BREL Swindon in spring 1972.

www.colour-rail.com



D800 Fleet List

1957 number	Name	Date named	Built by	Works number	Date introduced	First depot	Date withdrawn	Final depot	Status code
D800	<i>Sir Brian Robertson</i>	07/58-10/68	BR Swindon		Aug-58	82C	Oct-68	84A	C
D801	<i>Vanguard</i>	11/58-08/68	BR Swindon		Nov-58	83D	Aug-68	84A	C
D802	<i>Formidable</i>	12/58-10/68	BR Swindon		Dec-58	83D	Oct-68	84A	C
D803	<i>Albion</i>	03/59-01/72	BR Swindon		Mar-59	83D	Jan-72	83A	C
D804	<i>Avenger</i>	04/59-10/71	BR Swindon		Apr-59	83D	Oct-71	84A	C
D805	<i>Benbow</i>	05/59-10/72	BR Swindon		May-59	83D	Oct-72	84A	C
D806	<i>Cambrian</i>	06/59-11/72	BR Swindon		Jun-59	83D	Nov-72	84A	C
D807	<i>Caradoc</i>	06/59-09/72	BR Swindon		Jun-59	83D	Sep-72	84A	C
D808	<i>Centaur</i>	07/59-10/71	BR Swindon		Jul-59	83D	Oct-71	83A	C
D809	<i>Champion</i>	08/59-10/71	BR Swindon		Aug-59	83D	Oct-71	83A	C
D810	<i>Cockade</i>	09/59-12/72	BR Swindon		Sep-59	83D	Dec-72	84A	C
D811	<i>Daring</i>	10/59-01/72	BR Swindon		Oct-59	83D	Jan-72	83A	C
D812	<i>Royal Naval Reserve 1859-1959</i>	11/59-12/72	BR Swindon		Nov-59	83D	Dec-72	84A	C
D813	<i>Diadem</i>	12/59-01/72	BR Swindon		Dec-59	83D	Jan-72	83A	C
D814	<i>Dragon</i>	01/60-11/72	BR Swindon		Jan-60	83D	Nov-72	84A	C
D815	<i>Druid</i>	01/60-10/71	BR Swindon		Jan-60	83D	Oct-71	83A	C
D816	<i>Eclipse</i>	02/60-01/72	BR Swindon		Feb-60	83D	Jan-72	83A	C
D817	<i>Foxhound</i>	03/60-10/71	BR Swindon		Mar-60	83D	Oct-71	83A	C
D818	<i>Glory</i>	03/60-11/72	BR Swindon		Mar-60	83D	Nov-72	84A	C
D819	<i>Goliath</i>	04/60-10/71	BR Swindon		Apr-60	83D	Oct-71	83A	C
D820	<i>Grenville</i>	05/60-11/72	BR Swindon		May-60	83D	Nov-72	84A	C
D821	<i>Greyhound</i>	05/60-12/72	BR Swindon		May-60	83D	Dec-72	84A	P
D822	<i>Hercules</i>	06/60-10/71	BR Swindon		Jun-60	83D	Oct-71	84A	C
D823	<i>Hermes</i>	07/60-10/71	BR Swindon		Jul-60	83D	Oct-71	84A	C
D824	<i>Highflyer</i>	07/60-12/72	BR Swindon		Jul-60	83D	Dec-72	84A	C
D825	<i>Intrepid</i>	08/60-08/72	BR Swindon		Aug-60	83D	Aug-72	83A	C
D826	<i>Jupiter</i>	09/60-10/71	BR Swindon		Sep-60	83D	Oct-71	84A	C
D827	<i>Kelly</i>	10/60-01/72	BR Swindon		Oct-60	83D	Jan-72	83A	C
D828	<i>Magnificent</i>	10/60-07/71	BR Swindon		Oct-60	83D	Jul-71	84A	C
D829	<i>Magpie</i>	11/60-08/72	BR Swindon		Nov-60	83D	Aug-72	83A	C
D830	<i>Majestic</i>	01/61-03/69	BR Swindon		Jan-61	83D	Mar-69	83A	C
D831	<i>Monarch</i>	01/61-10/71	BR Swindon		Jan-61	83D	Oct-71	84A	C
D832	<i>Onslaught</i>	02/61-12/72	BR Swindon		Feb-61	83D	Dec-72	84A	P
D833	<i>Panther</i>	07/60-10/71	North British Locomotive Co, Glasgow	27962	Jul-60	83D	Oct-71	83A	C
D834	<i>Pathfinder</i>	07/60-10/71	North British Locomotive Co, Glasgow	27963	Jul-60	83D	Oct-71	83A	C
D835	<i>Pegasus</i>	08/60-10/71	North British Locomotive Co, Glasgow	27964	Aug-60	83D	Oct-71	83A	C
D836	<i>Powerful</i>	09/60-05/71	North British Locomotive Co, Glasgow	27965	Sep-60	83D	May-71	83A	C
D837	<i>Ramillies</i>	11/60-05/71	North British Locomotive Co, Glasgow	27966	Nov-60	83D	May-71	83A	C
D838	<i>Rapid</i>	10/60-03/71	North British Locomotive Co, Glasgow	27967	Sep-60	83D	Mar-71	83A	C
D839	<i>Relentless</i>	11/60-10/71	North British Locomotive Co, Glasgow	27968	Nov-60	83D	Oct-71	83A	C
D840	<i>Resistance</i>	03/61-04/69	North British Locomotive Co, Glasgow	27969	Feb-61	83D	Apr-69	81A	C
D841	<i>Roebuck</i>	12/60-10/71	North British Locomotive Co, Glasgow	27970	Dec-60	83D	Oct-71	83A	C
D842	<i>Royal Oak</i>	12/60-10/71	North British Locomotive Co, Glasgow	27971	Dec-60	83D	Oct-71	83A	C
D843	<i>Sharpshooter</i>	01/61-05/71	North British Locomotive Co, Glasgow	27972	Jan-61	83D	May-71	83A	C
D844	<i>Spartan</i>	03/61-10/71	North British Locomotive Co, Glasgow	27973	Mar-61	83D	Oct-71	83A	C
D845	<i>Sprightly</i>	04/61-10/71	North British Locomotive Co, Glasgow	27974	Apr-61	83D	Oct-71	83A	C
D846	<i>Steadfast</i>	04/61-05/71	North British Locomotive Co, Glasgow	27975	Apr-61	83D	May-71	83A	C
D847	<i>Strongbow</i>	04/61-03/71	North British Locomotive Co, Glasgow	27976	Apr-61	83D	Mar-71	83A	C
D848	<i>Sultan</i>	04/61-03/69	North British Locomotive Co, Glasgow	27977	Apr-61	83D	Mar-69	81A	C
D849	<i>Superb</i>	05/61-05/71	North British Locomotive Co, Glasgow	27978	May-61	83D	May-71	83A	C
D850	<i>Swift</i>	06/61-05/71	North British Locomotive Co, Glasgow	27979	Jun-61	83D	May-71	83A	C
D851	<i>Temeraire</i>	07/61-05/71	North British Locomotive Co, Glasgow	27980	Jul-61	83D	May-71	83A	C
D852	<i>Tenacious</i>	07/61-10/71	North British Locomotive Co, Glasgow	27981	Jul-61	83D	Oct-71	83A	C
D853	<i>Thruster</i>	08/61-10/71	North British Locomotive Co, Glasgow	27982	Aug-61	83D	Oct-71	83A	C
D854	<i>Tiger</i>	09/61-10/71	North British Locomotive Co, Glasgow	27983	Sep-61	83D	Oct-71	83A	C
D855	<i>Triumph</i>	10/61-10/71	North British Locomotive Co, Glasgow	27984	Oct-61	83D	Oct-71	83A	C
D856	<i>Trojan</i>	11/61-05/71	North British Locomotive Co, Glasgow	27985	Nov-61	83D	May-71	83A	C
D857	<i>Undaunted</i>	12/61-10/71	North British Locomotive Co, Glasgow	27986	Dec-61	83D	Oct-71	83A	C
D858	<i>Valorous</i>	12/61-10/71	North British Locomotive Co, Glasgow	27987	Dec-61	83D	Oct-71	83A	C
D859	<i>Vanquisher</i>	01/62-03/71	North British Locomotive Co, Glasgow	27988	Jan-62	83D	Mar-71	83A	C
D860	<i>Victorious</i>	01/62-03/71	North British Locomotive Co, Glasgow	27989	Jan-62	83D	Mar-71	83A	C
D861	<i>Vigilant</i>	02/62-10/71	North British Locomotive Co, Glasgow	27990	Feb-62	83D	Oct-71	83A	C
D862	<i>Viking</i>	03/62-10/71	North British Locomotive Co, Glasgow	27991	Feb-62	83D	Oct-71	83A	C
D863	<i>Warrior</i>	04/62-03/69	North British Locomotive Co, Glasgow	27992	Apr-62	83D	Mar-69	83A	C
D864	<i>Zambesi</i>	05/62-05/71	North British Locomotive Co, Glasgow	27993	Mar-62	83D	Mar-71	83A	C
D865	<i>Zealous</i>	06/62-06/71	North British Locomotive Co, Glasgow	27994	Jun-62	83D	May-71	83A	C
D866	<i>Zebra</i>	03/61-01/72	BR Swindon		Mar-61	83D	Jan-72	83A	C
D867	<i>Zenith</i>	04/61-10/71	BR Swindon		Apr-61	83D	Oct-71	84A	C
D868	<i>Zephyr</i>	05/61-10/71	BR Swindon		May-61	83D	Oct-71	84A	C
D869	<i>Zest</i>	07/61-10/71	BR Swindon		Jul-61	83D	Oct-71	84A	C
D870	<i>Zulu</i>	10/61-08/71	BR Swindon		Oct-61	83D	Aug-71	84A	C

* Estimated mileage based on official loco folders held at Swindon, rounded down to nearest 1000.



Disposal detail/present owner	Date cut up	Notes	Lifetime Milage*
J Cashmore, Newport	Jul-69	Stored: (U) 09 /68	923,800
BREL Swindon	Oct-70	Stored: (U) 06 /68	855,500
BREL Swindon	Nov-70		912,800
BREL Swindon	Oct-72		1,220,000
BREL Swindon	Apr-72		1,206,000
BREL Swindon	May-73		1,281,000
BREL Swindon	Apr-75		1,281,000
BREL Swindon	Nov-72		1,317,000
BREL Swindon	Feb-72		1,238,000
BREL Swindon	Oct-72		1,135,000
BREL Swindon	Sep-73		1,308,000
BREL Swindon	Oct-72	Stored: (U) 11 /68	1,092,000
BREL Swindon	Jul-73		1,243,000
BREL Swindon	Sep-72		1,099,000
BREL Swindon	Feb-74	Withdrawn: 01 /72, R/I: 05 /72	1,238,000
BREL Swindon	Oct-72	Stored: (U) 09 /71	1,087,000
BREL Swindon	Sep-72		1,144,000
BREL Swindon	Mar-72		1,078,000
BREL Swindon	Nov-85		1,137,000
BREL Swindon	Mar-72		1,125,000
BREL Swindon	Aug-73		1,126,000
Diesel Traction Group, at Old Oak Common	-	TOPS No. 89421 allocated	1,088,000
BREL Swindon	Feb-72		1,098,000
BREL Swindon	May-72		1,058,000
BREL Swindon	Jun-75		1,077,000
BREL Swindon	Oct-72	Withdrawn: 01 /72, R/I: 05 /72	1,104,000
BREL Swindon	Jan-72	Used after withdrawal	1,097,000
BREL Swindon	Oct-72		1,071,000
BREL Swindon	Apr-72	Stored: (U) 07 /71	922,000
BREL Swindon	Jan-74	Withdrawn: 01 /72, R/I: 05 /72	975,000
BREL Swindon	Oct-71	Stored: (U) 02 /69	447,000
BREL Swindon	Jun-72		1,011,000
East Lancashire Railway	-	Stored: (U) 11 /72, After withdrawal to BR Research, TOPS No. 89432	1,131,000
BREL Swindon	Feb-72	Stored: (U) 03 /69, R/I: 09 /69, Stored: (U) 10 /71	671,000
BREL Swindon	Feb-72		754,000
BREL Swindon	Jan-72		785,000
BREL Swindon	Mar-72	Stored: (U) 05 /71	781,000
BREL Swindon	Jun-72	Stored: (U) 04 /71	701,000
BREL Swindon	Jul-72		715,000
BREL Swindon	Aug-72	Stored: (S) 03 /69, R/I: 04 /69	790,000
BREL Swindon	Jul-70	Stored: (U) 04 /69	599,000
BREL Swindon	Feb-72	Stored: (U) 03 /69, R/I: 05 /69, Stored: (U) 11 /69, R/I: 06 /70	709,000
BREL Swindon	Mar-72	Stored: (U) 03 /69, R/I: 07 /69	761,000
BREL Swindon	Apr-72	Stored: (U) 05 /71	634,000
BREL Swindon	May-72		726,000
BREL Swindon	May-72	Stored: (U) 03 /69, R/I: 06 /69, Stored: (U) 09 /71	737,000
BREL Swindon	Dec-71	Stored: (U) 05 /71	765,000
BREL Swindon	Mar-72		653,000
BREL Swindon	Aug-70	Stored: (U) 02 /69	537,000
BREL Swindon	Jul-72	Stored: (U) 05 /71	697,000
BREL Swindon	Mar-72	Stored: (U) 03 /69, R/I: 05 /69, Stored: (U) 05 /71	654,000
BREL Swindon	Jun-72	Stored: (U) 05 /71	714,000
BREL Swindon	Jun-72	Stored: (U) 03 /69, R/I: 04 /69, Stored: (U) 05 /69, R/I: 11 /69, Stored: (U) 09 /71	704,000
BREL Swindon	Jun-72	Stored: (U) 07 /69, R/I: 06 /70	701,000
BREL Swindon	May-72	Stored: (U) 03 /69, R/I: 04 /69, Stored: (U) 09 /69, R/I: 12 /69	688,000
BREL Swindon	Apr-72	Stored: (U) 03 /69, R/I: 04 /69, Stored: (U) 05 /69, R/I: 01 /70	718,000
BREL Swindon	Jan-72	Stored: (U) 05 /71	734,000
BREL Swindon	Apr-72	Stored: (U) 05 /69, R/I: 09 /69	753,000
BREL Swindon	Jun-72	Stored: (U) 03 /69, Withdrawn: 04 /69, R/I: 10 /69	801,000
BREL Swindon	Jun-72		783,000
BREL Swindon	Dec-71		751,000
BREL Swindon	Jul-72	Stored: (U) 03 /69, R/I: 07 /69	689,000
BREL Swindon	May-72	Stored: (U) 09 /69, R/I: 10 /69, Stored: (U) 01 /70, R/I: 04 /70	727,000
J Cashmore, Newport	Jul-69	Stored: (U) 03 /69	688,000
BREL Swindon	Nov-71		744,000
BREL Swindon	Jun-72	Stored: (U) 04 /69, R/I: 09 /69, Stored: (U) 05 /71	683,000
BREL Swindon	Oct-72		1,044,000
BREL Swindon	Sep-72	Used after withdrawal	991,000
BREL Swindon	Apr-72		1,008,000
BREL Swindon	Jun-72		992,000
BREL Swindon	May-72	Stored: (U) 07 /71	922,000

Key to above table	82C	Swindon
	83A	Newton Abbot
C	83D	Laira
P	84A	Laira
81A		Old Oak Common



Left & Right: Sample of nameplate styles as applied to B-B Warship locos.

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Dark side of the 'Warships'



Above: D600 Active seems to have had a slight problem. In this image dated March 1960 the loco has one end supported by a crane, showing the dual lifting lugs located on either side of the loco at both ends. The bogie appears to have been removed and attention given to the underside equipment. **CJM-C**

Below Left: North British A1A-A1A No. D604 Cossack received front end and side swipe damage in February 1967, just a couple of months after it received four-character route indicator boxes. The damage reported to have been received at Laira depot was repaired between 2-22 March 1967 at Swindon Works. **CJM-C**



Right: With damage looking consistent with rubbing against stock, No. D803 Albion is seen inside Swindon 'A' shop in December 1968. At this time the rail blue livery had only been applied for a year and when it re-emerged following this damage repair it was devoid of the 'D' prefix to its numbers. **CJM-C**



Left and Below: In mid-October 1966, North British No. D846 Steadfast was involved in a serious collision in the West Country which resulted in one end having major structural damage. The entire front was deformed and required replacement, while the main longitudinal tubes had to be straightened. The damage saw the loco out of service for some 188 days, not returning to Newton Abbot depot until April 1967. This was one of the most serious collision damage reports received for a 'Warship'. Both: **CJM-C**



Left: In February 1968, North British-built No. D835 Pegasus received front end and cab side collision damage in the London area, which ripped open the lower skirt on the drivers side like a tin can. Repairs were quickly carried out at Swindon with the loco being out of traffic for just 44 days. When the loco returned to traffic it was repainted from maroon to rail blue. **CJM-C**

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