Leyland Torque

No.30 - WINTER 2005

THE MAGAZINE OF THE Leyland SOCIETY

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MEMBERSHIP

Subscription levels are £20 per annum (family £23), £24 for EEC members, £28 (in Sterling) for membership outside the EEC. Anyone joining after 1st April and before 31st July will have their membership carried over to the next 31st July, i.e. up to 16 months. This is good value for money and new members are welcomed. The new application forms are available from David J. Moores, Membership Secretary - address above.

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Winter 2005

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EDITORIAL

Hopefully we will back to normal with this issue of Leyland Torque in terms of timing following difficulties with the production of our magazines. With the catch-up there will inevitably be a few letters left over, and these will be put in the Spring issue of Leyland Torque. We are still in need of good articles and photographs, so please don't be shy and send what you can.

The AGM held in Coventry went well and was most enjoyable – especially the five films which were shown after the meeting, these having been eventually tracked down to the North West Film Archive. They included the official opening of the British Commercial Vehicle Museum in May 1984, The Leyland Works Outing to London in 1927 (complete with stuffed Lion with wagging tail, fixed to the roof of an allweather bodied Lioness LC1 demonstrator!), LGOC and United Transport chars-a-bancs, footage of the Works c1930 with Titans and Lions being built, Tigers, Lion demonstrator, Terriers, Beavers, Buffalos etc., a Trojan in the Service fleet, Overseas Depots, double deck Badgers in India, Australia's first open backed Titan entering the Depot, Badger buses and the first Cub chassis in South Africa, New Zealand Rlys. TS1 Tigers and various lorries in NZ, a Leyland-Metz being unpacked and much more – magnificent moving pictures and very much worth the effort of finding them!

At the AGM Ron agreed to be called Chairman rather than Acting Chairman, as he's really been doing the job for some time now. After the Meeting, Gary Dwyer agreed to join the Committee, along with the other two newcomers, Bob Kell (wrongly described as 'Wilf Dodds from Durham' in the last issue – sorry Bob and Wilf) and John Howie.

The Committee and I would like to wish you all a Happy Christmas and a prosperous New Year.

Mike

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LEYLAND SOCIETY NEWS

Postage on Torque 29

There have been problems with the Post Office making surcharges on the delivery of some issues of Torque No.29 (17 notified to us) and therefore we need to say "sorry" to those members involved. We are very aware that Leyland Torque, in a heavy duty envelope, comes just within the 150 grammes weight limit and, in the past have always been able to send out two or even three additional sheets of A4 paper with the Autumn issue, containing the agenda, minutes and accounts – ***never*** a problem in the past. To push the magazine into the next postage band not only costs the Society a further £60 or so, but the poor individual who has to stick on the stamps has to stick three on each envelope instead of one if we go from 47p to 58p.

With Torque No.29 we only had one and a half pages of A4 paper and the Post Office at Sheffield weighed sample envelopes and contents at 148 grammes. Your Editor has since weighed the same envelope and contents at 149½grammes – so, why have we had a problem?! The most probable explanation is that as paper absorbs moisture thereby increasing the weight, and it was ***very*** wet when Torque went out. Three of those recorded with fines were exactly 150 grammes but Allan Condie's weighed 153 grammes (it was probably raining at lot harder in Scotland!), and I weighed one damaged Torque which was returned, wet, and the magazine on its own weighed 165g! Of course those members who had not renewed in July/August, and had to be reminded, added another piece of paper and that added to the weight in those cases.

Clearly the Post Office are being a lot more diligent and in future we will not have to send any inserts in the magazine, or go to the next postage band for "safety" which we will do. Anyway, our apologies to those few concerned, as it must have been infuriating to have to not only pay the extra but go to the post office to pay it. Most annoying, but we do try hard to get things right!

2006 Leyland Society Gathering

We are hoping to have a Leyland Society Gathering in Leyland next year, so here is advance warning of the date – **Sunday 9th July**. Leyland Trucks have again offered their support to the event and the theme is likely to be "Fifty Years of the Leyland Atlantean" – it was at the 1956 Commercial Motor Show at Olympia that the prototype LFDD Mark III "Atlantean" 281 ATC was shown. All other Leylands will of course be welcome to come – it will not just be an Atlantean day (last time the theme was for 25 years of the T45). Entry forms will be sent out with the Spring edition of Leyland Torque.

An appeal

Regarding the early history of Leyland, a reader has pointed out that the magazine "The Engineer" may well have reported on the Crystal Palace Trials of 1896. Lancashire Steam Motor Co. entered a steam van but it did not qualify because it exceeded the permitted weight. Does anyone have access to copies of this magazine to obtain a photocopy of the report on the Trials? Please contact the Editor.

WORDS AND PICTURES

Cover Pictures

A head is turned by the smart new bus on the cover. Was it because the passer by thought it looked brand new, or because it was the only Olympian to be exported to Ceylon? Ceylon Transport Board (CTB) took only one Olympian, chassis no. 578299, registered 22-Sri-1396, although there was a larger fleet of Tiger Cubs and Albion Aberdonians purchased at the same period. Note the "export" features of the bodywork: full depth sliding windows, opening vents in the windscreen and scuttle vents at the front, and extra badges. The livery was red, and the oval panel on the side is used to show the CTB name in three languages. Olympian chassis 578262 went to China (as a demonstrator?) and probably had a similar style body.

On the back cover is a venerable Leyland fire engine, TB 2597. This was taken into the collection of old vehicles started by Leyland Motors in the early sixties, and is seen here in "as withdrawn" condition after being collected from an industrial firm at Blackburn. It was later put on display in the British Commercial Vehicle Museum.

Vehicle Data

On page 19 of this issue is a Comet, 460 DTD on chassis number 577248. This was an ECOS2/6R registered by Leyland and clearly used for developing the LAD cab transporter in 1958 before sale in April 1959 to R.Parker & Sons. It is not clear why it was registered and then was operated on trade plates.....note it does not carry Leyland "Service" livery of dark red, with gold insignia, fleetname etc.

Wigan TD1 NCME

When compiling the Fleet Series book on Wigan Corporation, the photograph seen on the right was not available. It shows a double decker No.60, EK 8100, at the central terminus, Old Market Place, where both buses and trams stood for many years. The shop immediate right is the Transport Department headquarters, the conductors paid in here, no doubt under the watchful eye of the G.M. who occupied the offices over the shops. The bus has a body built to Leyland design by the Northern Counties concern, based in the town.

(J.Horne collection)

EARLY HISTORY OF LEYLAND

Mike Sutcliffe's history of the Company

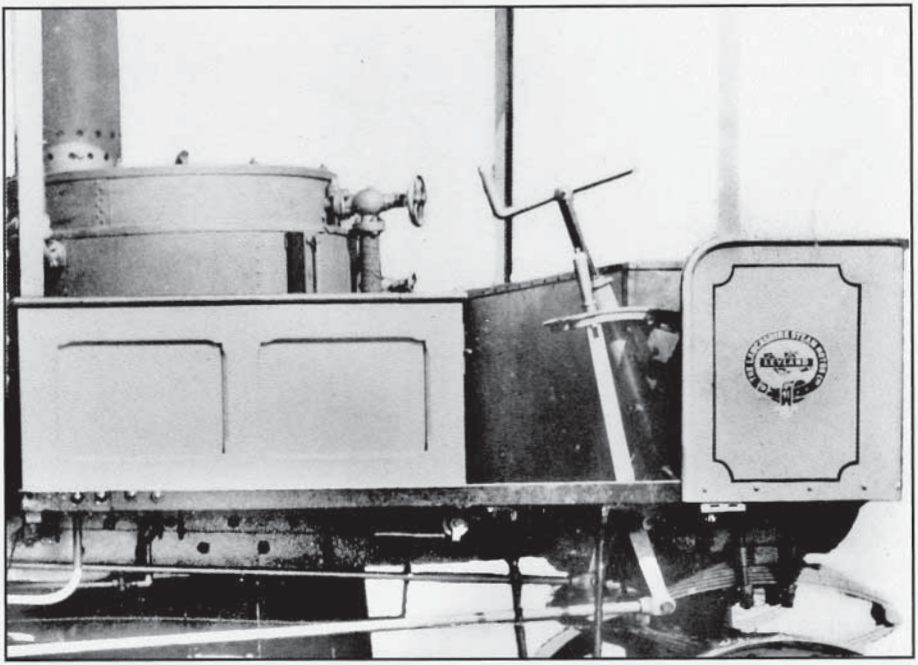
PART XII - VARIOUS STEAM ODDITIES - 1901-1905

In the last three chapters we have looked at the Class B Steam Wagon – its development, technical specification and operating conditions. The next wagon of importance would be the Class H wagon, introduced early in 1905 following the Heavy Motor Car Order of 1904, issued under the 1903 Motor Car Act. However, in the period 1901- 1905 there were a number of attempts at designing different wagons, mainly to carry heavier loads and for export markets, and these are the "oddities" described here.

In late 1901 two rather strange looking machines emerged from the Herbert Street Works of the Lancashire Steam Motor Co. They both had a very narrow front track with pivot steering in the centre of the front axle, amidships boilers and engines which drove directly on to the back axle without the use of chains. Works No.41 was built for the African Lakes Corporation Ltd. (a Scottish Missionary Foundation and not a commercial enterprise) and had a dropside truck body and a canopy extending over the whole of its length. It had an enormous boiler, the lower part of which was a conical shape, presumably for wood burning, and it had steel spoked traction engine type wheels. (*This wagon was wrongly described as a Foden in "The Undertype Steam Road Waggon" by Kelly*).

The African Lakes wagon, with fully elliptic front springs, awaits delivery. (BCVMA)

The large wood-burning boiler and engine directly driving the back axle. (BCVMA)

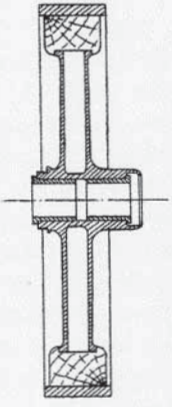


A close-up of the Leyland badge shows Work No.41. (BCVMA)

The second wagon with pivot steering followed a similar design though it had a platform body and no canopy. Its boiler was smaller than the African Lakes Wagon and the front suspension was a massive coil spring as opposed to two fully elliptic springs. The paintwork was signwritten the "Lancashire Steam Motor Co., Leyland" possibly for use as a demonstrator. The most significant development on this wagon was the use of a new type 12-spoke composite hind wheel, which had been designed by Henry Spurrier II in 1901. A photograph of this composite wheel was shown in a previous chapter comparing it with the original type of wooden artillery wheel with the 16 spokes. A cross section of the new composite wheel is shown here. However, it was not until the middle of 1903 that this type of wheel was used on the Class B wagons and, to start with, only on the hind wheels. In early 1905 Mann, Crossman & Paulin took delivery of 6 Class B wagons with smaller 8 spoke composite wheels on the front and these led to the general use of this type of wheel on the majority of Leyland steam and petrol wagons, right up to the introduction of the cast "electric steel" wheels around 1909-10.

The second wagon with pivot steering and enormous coiled spring outside the Herbert Street Works in Leyland. Henry Spurrier II is in the centre - he designed the composite hind wheels, as seen on this wagon, and a section of which can be seen opposite, top centre.

Opposite top are the two photographs taken at the Leyland LNWR Railway Station to compare the fronts of these two experimental vehicles. One wonders at their stability in the muddy and rutted road surfaces of the time. (BCVMA)

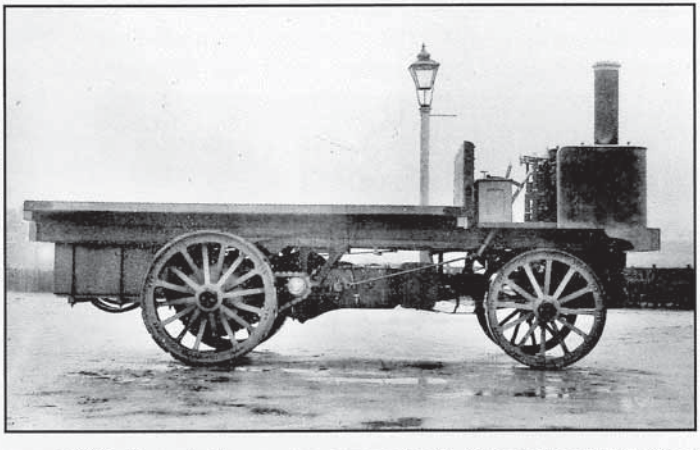


Whilst in 1901 mention should be made of another common error perpetuated in magazine articles. This relates to an early steam wagon operated by Henry Tate & Sons, Liverpool, Sugar Refiners, which was registered B 254 in 1904. It has been repeatedly described as a Leyland, but it was a Thornycroft! (possibly works no.45)

B254 - often described as a Leyland, but in fact a Thornycroft. It is possible however that Leyland had rebuilt the wagon and fitted a new boiler.

Larger Wagons, mainly for export

Approximately 22 Class B coke fired wagons were built in 1900/01 and orders were flooding in for this successful machine. A further 30 were built in 1902. These all had to comply with the stringent weight regulations thereby hindering proper development of the steam wagon. With its eye on the future, and also export markets where there were no restrictions, the Lancashire Steam Motor Co. developed a 6-ton Colonial wagon, which, if permitted to run on English roads, could have been an 8 tonner. It would appear that the first of these was built in late 1902, but it is difficult to date because the Leyland glass plate negative in the BCVM Archive is filed out of order and much earlier. There is, however, a tell-tale sign in the photograph of the wagon on the LNWR railway bridge near Leyland Station – that is the new lamp post which had been erected at the junction with Moss Lane. Photograph No.101, taken late in 1902, shows the Bryant & May (Swan Vestas) Class B wagon and in the background the old lamp post is being dismantled and the new one erected. This helps to date the photograph, and the new Colonial wagon was clearly after this! The 6 ton Colonial wagon had a much bigger engine, which can be easily identified by the large number of bolts around the area of the connecting rods, looking very angular and fabricated using angle iron. The striking rod, to change gear, again went through the centre of the second motion shaft as with the Class B, and this can clearly be seen on photographs of the offside of the wagons. This first Colonial wagon had chassis frame members with the flanges pointing outwards and traction engine type flat steel spoked wheels.

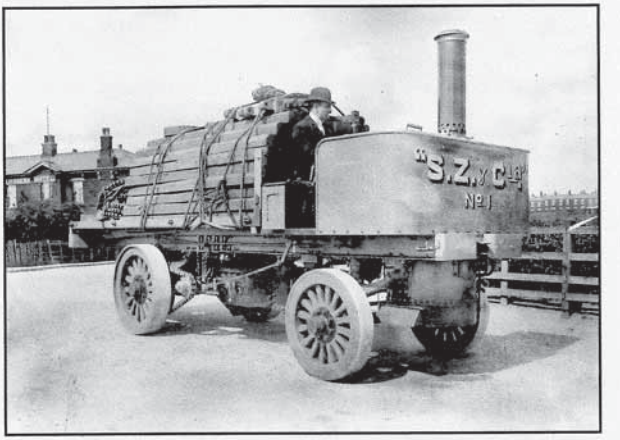


An off-side view of the 6 ton Colonial wagon, with traction engine type wheels. The tell-tale lamp post in the background helps to date this picture. (BCVMA)

In the summer 1903, four similar wagons were built, three almost identical for the South African Transport Syndicate, again with platform and no canopy. The fourth was for S.Z. y Cia., No.1, and this was on very heavily built wooden artillery wheels. It had a removable canopy and removable hinged sides. A rectangular brass plate on its canopy read "Supplied by Julius Harvey & Co, Queen Victoria, London EC" – does any reader know who this may be?

Two more of these 6-ton Colonial types were built early in 1904, one for Strassburg, possibly the last of these wagons and similar to the South African ones,

Here is first of three 6-ton Colonial wagons for the South African Transport Syndicate, Johannesburg. It is pictured on the LNWR Leyland railway bridge next to the Commercial Railway Hotel (which still exists). These were some of the first to have the oval brass maker's plate attached to the side of the front apron. (BCVMA)



The "S.Z. & Cia." wagon loaded with timber at the same spot, and on wooden artillery wheels. The larger engine can clearly be seen on this and the South African example above. (BCVMA)

The last of the Colonial 6 ton wagons was sold to "Illmühle" of Strasbourg, early in 1904. This model was probably replaced by the Class G. The wording on the drop-side reveals the wagon was owned by a flour miller. (BCVMA)

except that it had drop sides and a rail for a canvas tilt; the other was for Manchester Motor Transport, No.14. This was a large wagon and could have even been built to carry 8 tons. It could also have been the first with composite wheels all round. This and the other Manchester Transport wagons will be covered in a later chapter.

The Class G Steam Wagon

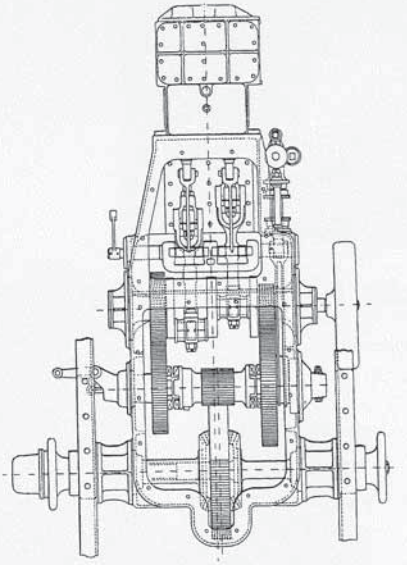
With the Class B wagon still in full production, 33 built in 1903, 32 in 1904, other developments were taking place in addition to the 6 ton Colonial wagon. Steam lawn mowers were also still being manufactured, even as late as 1904. In late 1903 another heavy type of steam wagon was developed, called the Class G. This was made for the home market but only about 6 were built between late 1903 and early 1905. Possibly this was in anticipation of relaxation of the weight limits and it would be interesting to know how they got permission to operate them when they were new.

If these new wagons were called Class G, what then were classes C, D, E and F? Despite all my researches it is only possible to speculate here – Class F was of course the wagon with the poppet valve engine, first produced in sensible numbers from 1911, however, it would appear that 2 were built in 1908 (possibly line numbers F2 and F3, so what was F1?). Could the original design for this engine have been produced as early as 1903, immediately before the emergence of the Class G wagon, or were Leyland just filling a spare letter when the Class F was introduced? Classes C, D and E could of course relate to the two types of pivot steering wagons and the 6 ton Colonial model just described? Another line of thinking may be that, as Coulthard of Preston made their own Class C and Class E wagons, and there was also a Leyland steam wagon with a Class D Works No. produced in 1907 (possibly already in build by Coulthard at the time of the merger in early 1907), is it possible that Leyland Motors Ltd. and T. Coulthard & Co. operated a lot more closely than we have always thought prior to 1907, and they allocated the class letters in a common series?

The first Class G was described as an 8-tonner, built for Acme Flooring & Wood Paving Co. at the end of 1903. Note the smooth sided engine casing of this class, and the 8-spoke composite wheels. (BCVMA)

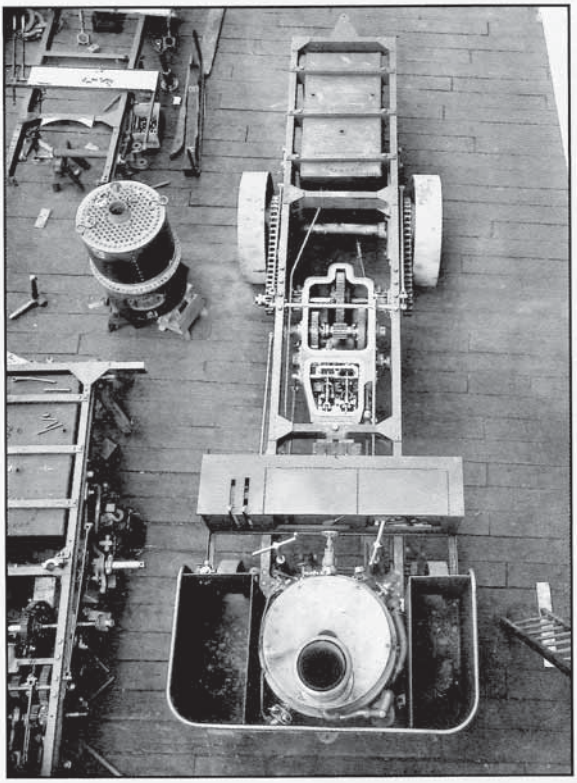
The first Class G appears to have been built in December 1903, as an 8-ton wagon. It was registered B 374 from new and was supplied to the Acme Flooring & Wood Paving Co. (1904) Ltd, London, presumably in readiness for the formation of the Company early in 1904. This was a tip wagon with hinged sides and it had 8-spoke composite wheels all round and was possibly Line No.G1. Registration records show that it had gone by 1921, B 374 being re-issued to a Stoewer car. The next Class G was a 6-tonner, which was built by August 1904 and photographed profusely for use in advertisements. Many of these adverts appeared in The Commercial Motor Magazine in 1905 at the time of the introduction of the Class H wagon and the Leyland publicity material described it in those adverts and brochures as a Class H, much to t

One of the last oil-fired steam lawn mowers stands outside the newly built factory, at what was to become called the North Works, in 1904. In the background, a steam wagon moves away. (BCVMA)

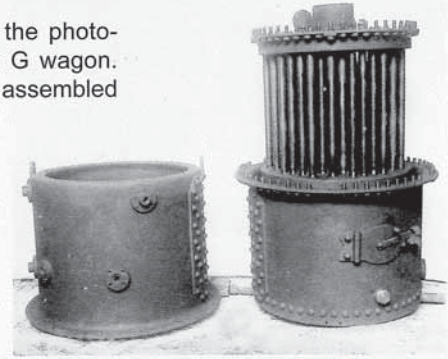


The drawing on the left is from *"Modern Steam Road Wagons"* by Mr. William Norris, who describes it as "engine of 5 ton steam wagon, 1906 pattern". However, this is of a Class G engine, not Class H which was current at the time. The layout is similar to the Class B, with one spur wheel on the compensating shaft, and striking rod passing through the centre of the second motion shaft, both features of the Class B wagon. The Class H had two spur wheels on the compensating shaft and the strke rod was over the top of the second motion shaft.

the confusion of previous learned Leyland historians. It is this mis-information that confused Charles Lloyd when he described the early Class H wagons for the Road Locomotive Society Records. (The Class H was definitely different and had a new type of engine gearing). From close examination of the photographs of this wagon it is clear that the engine was not a Class H and was indeed far too big to have been one. Looking at the number and pattern of the rivets on the front apron it seems that it was this machine which was sold to J. Bottrill & Co, Burton-upon-Trent, by November 1904, by then fitted with a canopy over the cab.



A view from the roof (note the ladder for the photographer!) showing the layout of the Class G wagon. Class B wagons, including B121, are being assembled on the left.

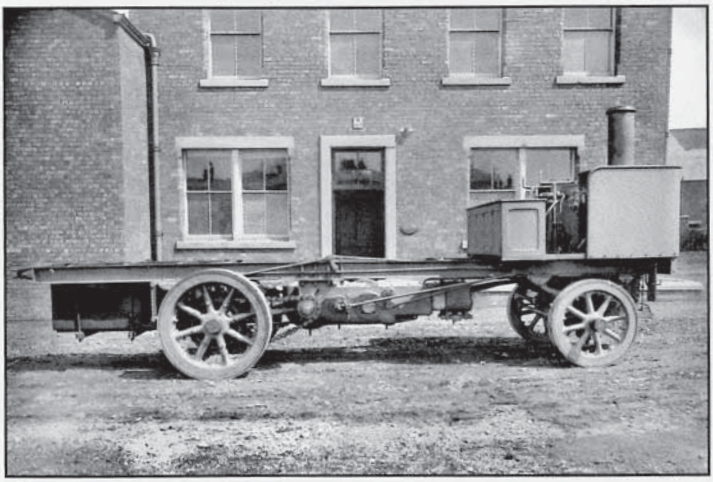


The large fire tube boiler of the Class G wagon.

(Both photographs BCVMA)

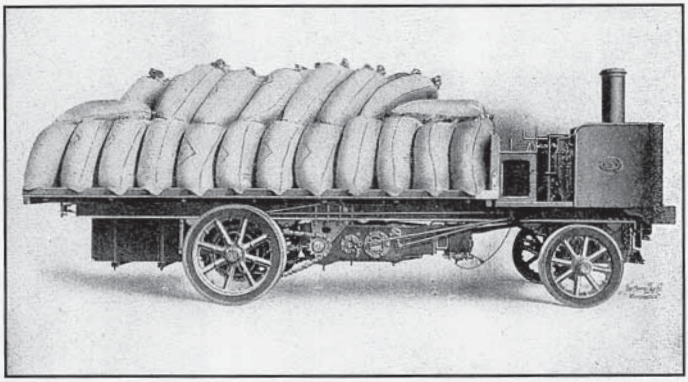
Messrs Tooth & Co, Kent Brewery, also had what appears to be a Class G wagon in the summer of 1904, with Colonial wheels and a high front apron. It carried a brass casting on its front apron of a rearing horse, perhaps with the intention of causing future enthusiasts to think that it was made by Aveling & Porter! This wagon was followed by another Class G, (photographed with a trailer and 10-ton load, on composite wheels), and lastly by another Manchester Motor Transport Wagon,

registered N 173, probably in early 1905. This had a large boiler and may well have been one of two wagons purchased at the time – more on these later.



A view of a Class G steam wagon. Compare it with the so called "5-ton wagon" in the advertisement seen below which seems to be an artist's impression of the photograph seen left. (Photo BCVMA)

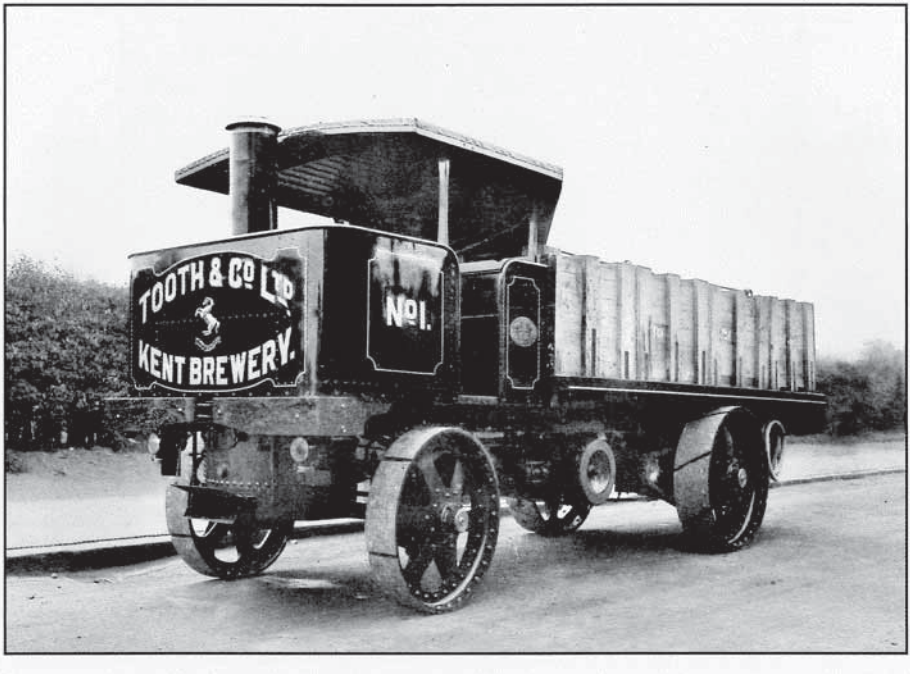
THE LANCASHIRE STEAM MOTOR CO. LTD.



Standard 5-ton Steam Wagon, with composite wheels.

There is a very detailed description of the Class G steam wagon, including drawings, in "*The Engineer*" of 16th September, 1904. The engine was of the compound horizontal pattern with cylinders 4ins. and 7½ins. bore by 7ins. stroke, capable of developing 45 hp 1t 450 rpm. It had constant lead valve gear, the valves being of a special balaced flat type "without springs or other appurtenances, lable to come disordered". There were two speeds, fast speed 11.35:1, giving a speed of 5.6 mph, and slow speed 24.46:1, giving a speed of 2.6 mph. The boiler was of the fire-tube central feed type, having 110 sq. ft. of heating surface, and 4.9 sq. ft. of grate area, built for a

ABOVE : The Class G wagon of J.Botrill & Co. Ltd. of Burton-on-Trent is seen on trade plate B3K at Leyland. BELOW: The Tooth & Co. wagon displaying a rearing horse on the front apron. The plate below is inscribed "Invicta" (?). It is loaded with a test load of wooden crates each marked "1 ton". (BCVMA)



working pressure of 200 psi. The driving wheels were 3ft. 9ins., with 10 ins. wide tyres. the axles were Mannesmann solid drawn steel tubes, with brackerts for carrying the springs shrunk on, and the fram of the wagon allowed for a platform up to 16 ft. long and 6 ft. 6 ins. broad. Steering was of a modified Ackermann type, operated by handle, worm and worm wheel.

This concludes the chapter on these few steam wagons which were outside the general volume production of the Lancashire Steam Motor Co., now incorporated into a limited company. Just why production was halted on these heavier models is not known - possibly they were just too heavy. However, the Class H five tonner was introduced in 1905, following the relaxation of the regulations, and it was probably considered that this new 5-ton wagon was adequate for the loads required. Possibly there was another reason: at the end of 1904 the first internal combustion engined vehicle was produced at Leyland, being the class Z 30cwt 12hp 2-cylinder lorry. This was quickly followed by the Class Y 24hp Leyland-Crossley, which was a great success in 1905/6, and no doubt the Lancashire Steam Motor Co. Ltd. had to rationalise its production effort in order to build large quantities of the new Class H and Class Y vehicles. The Class H continued the alphabetical series series which started with Class A (although the latter was not specifically named as such), and had now reached H for steam wagons, whereas the petrol vehicles started at Class Z and worked backwards through the alphabet, reaching Q befotre the outbreak of the First World War.

PRESERVED

Recently a father and son team appeared at the BCVM seeking information on a Comet they are planning to preserve. The vehicle in question is a Comet 13C/3R of 1963 (chassis number L.30020) which Leyland used briefly as a demonstrator, with registration CTJ 151B. It then joined the Leyland Motors transport fleet as fleet no.11, and ran on trade plates, but was then reregistered UTJ 999H in 1969. Eventually it was sold to a farmer in Lancashire and after many years service it was withdrawn and left derelict. Discovered recently, it has been "rescued" and the intention is to restore it to a roadworthy condition and paint it in Leyland Motors transport fleet livery.

A preserved post-war Leyland Comet fire appliance, one of fifty built for use in various British fire brigades. This example, RPG 22, worked for Surrey Fire Brigade.

(T.A.Brown)

LEYLAND CABS and BODIES

Feature edited by Ron Phillips. All correspondence to Mike Sutcliffe

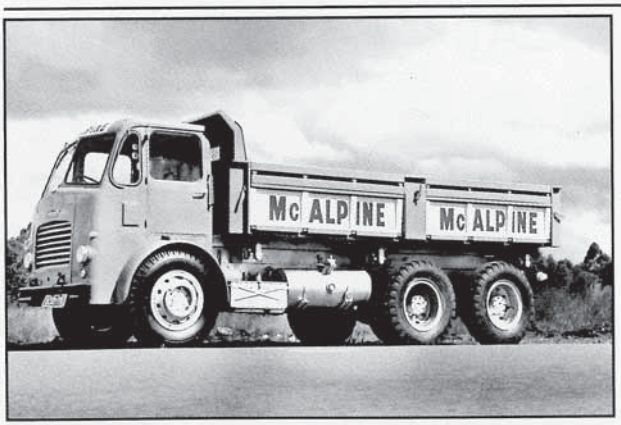
The year 1958 saw the introduction of the LAD cab for Comets, which were built in a separate factory from the heavy duty trucks, and the continued evolution of the design. The South Works continued for the time being with the "mouth organ" cab, as seen below, well as building full fronts for the Leyland Titan.

Leyland lorry cabs 1958

It was now some five years since Leyland Motors had taken over Albion, and thoughts were turned to the production of a cab able to be used by both the Leyland and Albion plants. At first this project was named "Commonised All Steel Cab", but then it became the "LAS", and later still became known as the "LAD" (or Leyland-Albion-Dodge) cab. It was to be built by an outside contractor (Motor Panels) and Leyland would only be concerned with mounting the cab on the chassis on the line.

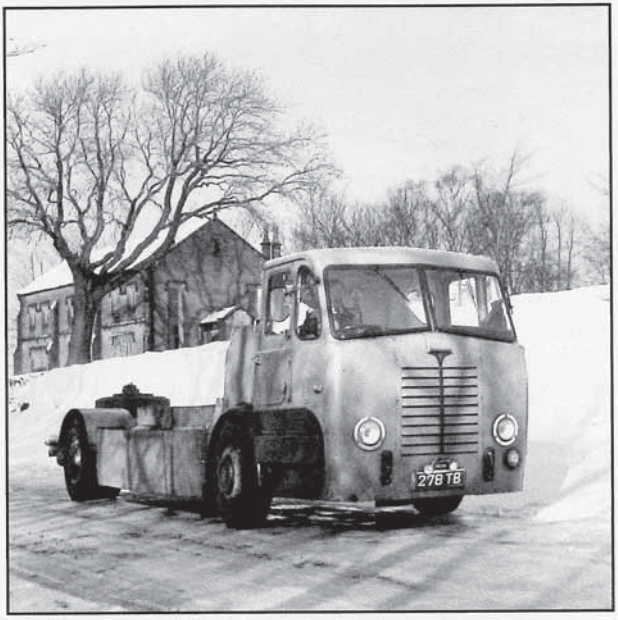
The prototype was worked on at Leyland, and the first version to appear on the road was that for the forward control Comet, which was being up-graded to suit new weight limits then being introduced. The Comet version of the LAD cab had a high door sill and lower parts which had a distinct "bulge" when compared with the low-door version that was to be built for the heavy goods range. (See illustrations on pp. 16-17.) The styling had something of an American car about it, like the contemporary "Big Bedford".

This view in the South Works body shop shows goods cabs being assembled on jigs. It illustrates the fact that a cab was quite a complicated amalgam of parts. (BCVMA)



South Africa was a very important market for the Company, and from the early post war days there were facilities for the local assembly of trucks and buses. Here is a Leyland cab with modifications on a 20H series Hippo, with locally built tipping body by Morewear Industries. The vehicle carries SA trade plate 102 TG. (BCVMA)

CAB VARIATONS



This snow scene taken in February 1958 shows a standard heavy-range cab fitted to a Tiger Cub PSUC chassis. Described as a "Road Mileage Test", the purpose seems to be to run up a high mileage to test out the durability of Tiger Cub units. The driver has been given the comfort of a proper cab, and for once the stylists have been at work to produce (rather surprisingly) an attractive grille for a test-bed vehicle. It carries a "Leyland" badge and trade plates 278 TB. (BCVMA)

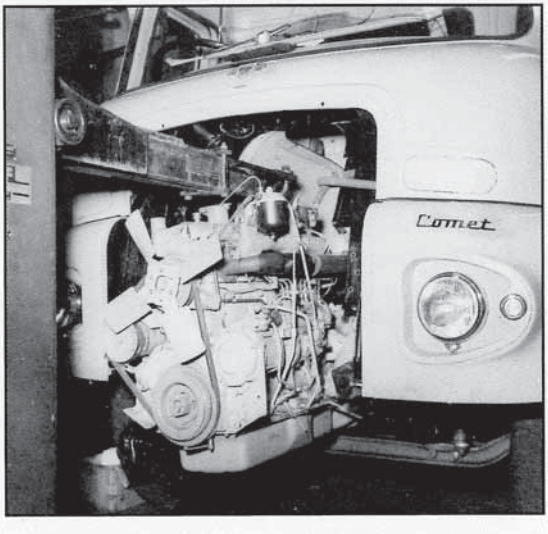
The LAD cab put in its first appearance on the road with effect from mid 1958 and the official launch was at the 1958 Earls Court Show. Leyland presented the new Super Comet which offered a gvw of 14 tons, was powered by the O.375 engine, had air brakes, a new rear axle with reduction hubs which lessened the stress on the half-shafts, and a top speed of 68mph depending on the final drive ratio chosen. The cab was given the name "Vista Vue" by the publicity department, but this name does not seem to have been used widely. The cab used for the Super Comet, and also on the 12 ton gvw Comet from 1959, can be called the "short-door LAD" as for use on the Albion range and the heavy range Leylands, whose front axles are set back from the front, a "long-door" cab was devised, with differences between the two makes.

Once again my thanks to Neil Steele for assistance with this serial article.

An early LAD cab mounted on a Comet chassis is photographed to show the separate parts which can easily be removed to give access to the radiator and engine. Note the bumper bar is independent of the cab structure and is bolted directly to the chassis rails, with provision for towing eyes. (BCVMA)

THE 'LAD' CAB

The picture on the right illustrates the method of withdrawing or inserting the engine, by using an engine crane. At the time this was taken, Leyland engineers were evolving the same idea for the rear-engined Atlantean bus. Within a few years, of course, the tilt cab was to revolutionise access to truck engines. (BCVMA)



This publicity shot for the new "12 ton Comet, chassis and cab" with the LAD unit clearly shows the high level of the door sill, and the need to fit a ribbed ring on the front wheels to assist the crew in climbing into the cab. The visor is an extra to reduce reflections off the wide curved windscreen. (BCVMA)

LAD CABS FOR COMETS

This picture was taken in the summer of 1958 and it shows "Cab Transporter in experimental stage". Although articulated trucks carrying cars and lorry cabs are familiar today, the idea was new then. LAD cabs were to be built outside Leyland and an efficient way to carry them was needed. The Comet ECOS2/6R was not a permanent part of the Leyland fleet, see page 23. (BCVMA)

FOOD FOR THOUGHT

Feature edited by Wilf Dodds. All correspondence to Mike Sutcliffe

73. Wilkinson double take (Torque Nos.16, 18, 29)

The Editor advises that the photo of **UP 5438** was taken looking north in Balcarres Road, Leyland. Is that the chimney of Geo. Dewhurst's Farington Mills in the background? Dewhurst was a very early customer of Leyland with steam wagons. We still need to know where was "The Show".

111. 8.6 litre engine power output (Torque Nos.26-29)

Alan Townsin writes that one minor correction needs to be made to his item on this, (see Torque No.28 pages 19-20). Information that has come to hand since it was written indicates that the earlier Leyland 8.1 litre oil engines did have a spell of fairly widespread big-end bearing trouble in 1932-33. Almost the whole industry seems to have learnt the hard way that the typical white-metal bearings that worked quite well in petrol engines of the early 1930s were not up to the job for oil engines, especially at the higher speeds, and there were spells of trouble and experimentation before satisfactory answers were found. At Leyland, for a time around 1933, a solution was to use duralumin con-rods working direct (i.e. without separate bearing metal or shells) on a case-hardened crankshaft but later, copper-lead big end bearings were adopted. There's an interesting if rather technical article on this subject in the July 1946 issue of *The Leyland Journal.*

112. Millburn Motors Limited (Torque Nos.26-29)

Nothing more to add to this topic except this excellent photograph taken by John Howie of surplus Ribble Leyland bodied Royal Tigers and Titan PD2s at Millburn Motors' premises.

117. Gardner engined Leylands (Torque Nos.27-29)

Alan Townsin's mention of the Tilling Group operators really "getting hooked on the 5LW at the time" is confirmed by the conversion of all Titan TD1s and most TD2s in the Eastern Counties Omnibus fleet from their original petrol engines to the 5LW unit. On formation of the company, they inherited 15 TD1s from United, 22 from the Eastern Counties Road Car, another 12 from Peterborough Electric Traction and 12 from Ortona Co. In addition there were another ten bought new, just after the Company was formed, to be followed by 30 TD2s also purchased new. There were also 4 TD1s and 6 TD2s acquired with the business of Norwich Electric Tramways. With the exception of three "new" TD2s which received the 7.7 litre AEC A173 diesel engine, all of them were converted to the 5LW at varying dates between January 1937 and March 1939. There were also ten TD4s whose original Leyland 8.6 litre diesel engines were replaced by 5LWs and, when acquired in 1945, two former Plymouth Corporation Titans, one TD1 and one TD2, also received 5LWs. All the TD1s and some of the TD2s received new lowbridge or highbridge ECW bodies in the period from 1936 to 1940 and the 5LW conversions were either dealt with at the time of rebodying or earlier. Of course, many of the TD2s were rebodied by ECW in 1949-50 and fitted with Cov-rad radiators, and went on to being some of the longest surviving TD2s – no doubt many readers will remember them well.

One of the famous Eastern Counties TD2s fitted with Gardner 5LW engines, seen here in 1959 – they lasted until the early 1960s. A207, NG 3868, received an AEC A173 7.7 oil engine in 6/37 which was replaced by a Gardner 5LW on rebodying by Eastern Coach Works. Does any reader have one of the Cov-rad "Titan" badges, as seen on A207?

(Mike Sutcliffe)

119. Leyland Racing Car Transporters (Torque No. 29)

Nothing, so far, to identify the E.R.A. transporter but index marks FU, in fact, continued up to April 1929, and reference to PSV Circle's publication PE4, as it relates to Enterprise & Silver Dawn Motors, suggests that FU 5276 (if that ***is*** the transporter) would have been registered early in 1926. John Bishop, who originated this item, comments that AFU does not appear in Glass's Guide for 1938, whereas "another source" – here he has to be referring to the late Les Newall's excellent book ***History of Motor Vehicle Registration in the United Kingdom*** - shows it as issued from March 1938. Glass's Guide for 1954 certainly confirms this but is a little "thin" on 1954 issues, the assumption being that the Guide appears/appeared quite early in its "cover" year.

121. Darlington Triumph Tiger PS1/1s

Bob Kell writes "in the purchase by BTC of Durham independents to eventually form Durham District Services, managed by United, there are some loose ends – notably the large existing order by Darlington Triumph for Guys that United would not have (although they eventually got two – GU1 and GGH1). In newly found papers Darlington Triumph ordered 4 Tiger PS1/1 in November 1947 (Bob has a copy of the contract sheet) with an estimated delivery date of early 1950; this we did not know, and neither Triumph nor United took delivery. However Express in Durham did get 4 PS1/1s with Gurney Nutting coach bodies in 1950 which went to Durham District and fine vehicles they were – the major DDS coaching stock. Is there any way of tracing these chassis through Leyland records and is anyone likely to have done this already? The Triumph Guy orders have been traced through Guy records at BCVM."

One of the Gurney-Nutting bodied PS1/1s referred to in the above item, running for Durham District Services. (Photo by the late Dr. M.A.Taylor)

122. Leyland Royal Tiger Doyen

While collating the Multipart records at Chorley, Ron Philips found copies of customer orders relating to the Leyland Royal Tiger Doyen which refer to the Doyen "Silver Crown" and "Gold Crown" (*sounds like a REO!*). These designations appear to have never been used in enthusiast circles, so, how did we miss them? Does any reader have any further information on them?

123. Leyland Cheetah WG 7239

Bob Kell wants to enquire about a coach which has cropped up in records he is examining and the published story is somewhat curious. The PSV Circle in fleet history PA20 (O.K. Motor Services) relate the following – LZ2A chassis no. 200700 with Burlingham C35F body. Ordered by Wilson, Hunwick, Co. Durham and shown at the 1938 Scottish Show (in Bluebird livery?) and used by W. Alexander (fleet no. K7) from 6/38 until 5/39 when it was sold to London dealer, Coaches & Components Ltd. It then entered the O.K. fleet until withdrawal and scrapping in 1/56. However, I now find that in May 1939 it was painted into Wilson's Royal Bus Service livery of Ruby red and cream; if Wilson had ordered it (and he was not a noted Leyland user) then he did get it in the end, presumably at a satisfactory discount! The coach was sold on to O.K. in February 1941.

But, was it an LZ2A, "*The Leyland Bus*" records that the model was replaced in 1938 by the LZ4 and LZ5 models, so why put the "old" model on display? And why would Alexander want it when they had 100s of Cheetahs and were receiving their own batch of Burlingham bodied Cheetah coaches, WG72xx registered?

Lastly, while I knew the O.K. fleet in the 1950s, I never saw WG 7239 and I know of no photograph of it. Presumably it was quite similar to WG 7263, as shown in my own photo taken at the depot of Sowerby of Gilsland, Cumberland in the remains of "Bluebird" livery in September 1958. Sowerby ran at least fourteen ex-Alexander Cheetahs on a large contract for staff transport to the ill-fated "Blue Streak" Rocket testing range in the wilds of the north Pennines at this time. The "evening procession" of the "blue streak" fleet was quite a sight!

A fine view of ten Leyland Lynx loaded with milk churns at an Aberdeenshire dairy. Note the sce

ne inside the dairy. No prizes are offered for counting the churns. (BCVMA)

ODD BODIES!

Edited by Bob Kell. All correspondence to Mike Sutcliffe

Replies this time from John Bennett, Maurice Doggett, Roy Marshall, Tony Hall, Paul Rouet and Cyril McIntyre. Thank you.

Leyland TigerTS2, Furness/Ribble, TF 1555 (Torque Nos.28/9)

An extraordinary coincidence which links this vehicle, as Mike Fenton suggested, to Lincolnshire Road Car Co. Leyland Lion TL 4315 in Torque No. 28 appears to be confirmed. John Bennett reveals that the Bracebridge bodies from TL 4314/5 were advertised for sale in *Commercial Motor* (November 1938) for £100 each. TF 1555, sold to Millburn Motors, dealer, Preston, in September 1938, appears to have used one of these bodies, fitted for Rowe of Cudworth, either by the operator or by a coachbuilder, with modifications around the third bay and conversion for half cab. When the coach was with Premier Travel post 1945, it was noted that the body did not seem very firmly attached to the chassis! So, who had the other body?

Leyland Cub SKP, B. Box, AWB 831 (Torque No. 28)

John Bennett suggests that the north country firms of Cravens or Barnaby could have built the body, but direct evidence is lacking.

East Midland Leylands BAL 606, BRR 909 (Torque No. 29

The involvement of ECW in the rebodying/rebuilding of odd members of this fleet has aroused interest. Roy Marshall confirms that Tiger TS7 BAL 606 was rebuilt to Titan TD4 specification. Maurice Doggett confirms the delivery of the TD4 chassis 6425 with a new ECW body (no.7597) to East Midland on 11th March 1942, when it became fleet number D19 in place of B6.

TD4 BRR 909 (chassis 9786) received a new ECW top deck on 3rd November 1942. Although ECW had vacated the Lowestoft factory in May 1940 for Irthlingborough, the Lowestoft plant did reopen for limited work in 1942. Maurice considers that, on balance, the EM work was carried out there. Roy Marshall notes that ECW also fitted a new top deck to an AEC Regent, VO 8002, in 1937. Are any photographs available, please?

(Photo J.Gillham)

Carter(Alpha), Lion PLSC3, TY 3085 (Torque No.29)

John Bennett considers the body shown to be from a Greenline R class coach. These AEC Reliance model 660 were rebodied by Weymann in 1935, so that on TY 3085 is probably an LGOC C28R coach body.

Leyland PS1/1 JPW 259 (Torque No.29)

All our correspondents identify this 1948 Tiger PS1/1 (481419) as carrying a Lee of Bournemputh C33F body.The original owner was W.Raspberry of Grimston, Norfolk, who also had a 1947 Plaxton bodied PS1 GVF 533, which were unusual purchases for

a very rural independent with a Kings Lynn - Fakenham service. In 1951 the business was sold to Eastern Counties, and the Tigers became AS959/60. JPW 259 was sold to dealer Ben Jordan in 1957, and then to C.E.Naylor of Halesworth in May 1958.

JPW 259 is seen when running for Eastern Counties as No.AS960.

(M.Sutcliffe collection)

The stable-mate of JPW 259 is GVF 533, also seen here after acquisition by Eastern Counties. It has a Plaxton body.

(late Dr.M.A.Taylor)

Erne Bus Co. Leyland Comet IL 5561 (Torque No.29)

Cyril McIntyre gives a full history of this vehicle. It was new in 1951 as a typical Irish country bus (with Comet IL 5414) with a B32F body by Jimmy Murphy who was a nephew of Maurice Cassidy of Enniskillen, owner of the Erne Bus Service. Erne was acquired by the UTA in 1957, but the Comets (E201/2 in the UTA fleet) were soon sold to Edward Maguire, a former Erne bus driver, who acquired three bus services based in Carrigalan, County Leitrim, which were wholly within the Irish Republic, and thus excluded from acquisition by UTA.

Murphy of Dundalk also built a B31F body on a 1932 Leyland Lion LT4, ZI 8757, acquired by Cassidy from the Irish Army in 1946. A daughter of Maurice Cassidy has set up a website on the Erne business (www.geocities.com/ernebusservice).Tony Hall knew a depot inspector in the W.Midlands who was born near Enniskillen and as a youth had worked for Erne, which latterly had 2 Saunders Roe bodied Royal Tigers.

Marshall, Blackpool Tiger TS7 FV 7421 (Torque No.29)

The concensus is that the body shown was indeed by Burlingham, although not a standard body. W. Marshall & Sons were faithful to Burlingham in the 1930s, with bodies on a Lioness, two Cubs, a Maudslay SF40, a Tiger TS7, a Bedford WTB, and probably for this TS7 and a TS8. The deep roof is unusual, hence Mike Fenton's reservations, but a number of coachbuilders did experiment with new designs at the time. Roy Marshall suggested its use as a band coach.

New Items. Blair & Palmer BG 746

My Birkenhead fleet list shows BG 746 new in 1932 with a Massey body. Given the large numbers of Titan TD1s and TD2s in the Birkenhead fleet, is the body shown a Massey "look-alike" for the Leyland Titan body or given the frailty of some pre-war Massey bodies, is it a transplant of the genuine article? This is another wartime view with white lining and head lamp masks, but the bus looks in excellent condition.

(The Omnibus Society)

Cumberland Titan TD5 DRM 10

Cumberland retained its allegiance to Leyland as a chassis supplier well into the BTC era. This however is the first use that I can recall of the grafting of a piano-front body onto a late thirties Titan, although it has been rebuilt with a "bay window" cab to fit. No doubt readers will know of other examples, but how did DRM 10 acquire this body? Picture on opposite page.

Leyland Tiger BU 8600

This body with its round topped windows/pillars is reminiscent of Northern Coachbuilders or Plaxton practice. The front wings have received skilled attention. It is not known to be by NCB. Can readers suggest alternatives? Picture opposite.

The piano-front body on DRM 10 has certainly had new sliding vents fitted, as well as a new cab front, and almost certainly the rear wheel arches have been moved back.

(Photobus)

Is BU 8600 a TS7 or a TS8? The panel beater has created stylish new wings to hide the tell tale dumb irons.

(M.Fenton collection)

The body mounted on UH 7564 could be an old one rebuilt or a new one from the "Covrad era". Can any reader identify it, please?

(M.Fenton collection)

Leyland TS1 UH 7564

Pictured above is a rather ungainly coach body. Is it an unfortunate rebuild of a body contemporary with the chassis, or is it a post-war creation ? The chassis is one of a pair of Tiger TS1s, chassis numbers 60870-1, UH 7563-4, which were new to Cridland of Cardiff in 1930, and which had Plaxton coach bodies when built.

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TALE OF A TITAN TD6

by Ron Phillips

This magazine aims to record and explain the activities of Leyland Motors over the years, but occasionally we come across a bizarre event which does not seem to be quite right and consistent with the way in which Leyland worked (nor, in this case, the way in which the transport departments of Birmingham and Edinburgh ran their affairs). So here are the facts, and if you know any of the background of what happened, please write and let us know. This is the story of a truly unique vehicle, even though its moment of glory came late in its life.

Birmingham 968, seen here when new, was a Leyland bodied TD6c of a small trial batch which led to a larger order. Compare the styling with the Metro-Cammell bodied bus on the opposite page, the subject of this short article. (BCVMA)

The vehicle involved in this mystery story was Birmingham Corporation 1298, (FOF 298) new in 1939. It had been withdrawn from sevice by 1952, but was sent to Leyland in March when its 8.6 litre engine and torque converter transmission were taken out and replaced by an O.350 engine and a Wilson pre-selector gearbox. It then went back to Birmingham and re-entered service, as seen in the photo on the opposite page that shows it in a somewhat careworn state on 6th April. It is assumed that it was Leyland who initiated the idea of testing an O.350 engine in a bus. At the time, the Tiger Cub was being developed along with the prototype rear-engined double deckers STF 90 and 684 ATC. If this is so, why was Birmingham involved in this? Was it because Leyland wanted the bus tested in arduous city service? Was a pre-war bus chosen for the experiment because the unladen weight was less than contemporary double deckers? It is true that Birmingham had tried out some lightweight double deckers, but FOF 298 does not seem to be connected with that experiment.

In 1953 the bus was purchased by Leyland, and then was subsequently sold to Edinburgh Corporation. Was the experiment over as far as Leyland was concerned? If so, why did Edinburgh wish to try it? For tramway replacement, Edinburgh had made the choice of Leyland PD2/20 chassis, powered by O.600 engines, but with "Orion" lightweight bodies by Metro-Cammell. Was FOF 298 seen as a way of comparing a bus with a small engine (but of similar weight) with the new vehicles?

New wine in an old bottle. Birmingham 1298 is seen in Station Street on route 36, in service from Highgate Road Garage, in April 1952. (Barry Ware)

The answer to the latter question is probably "no," as the PD2/20s did not enter service until a year after FOF 298 arrived in Edinburgh. It was purchased from Leyland in April 1953, and it is clear that the exterior of the body had been repanelled and all belt rails, cant rail ventilators, and certain other "Birmingham features" had

FOF 298 is now seen as Edinburgh 185, on a gloomy day at Stenhouse terminus in 1955. The repanelled body certainly gives a modernised look. (G. Fairley)

been removed.Even the opening windows on the upper deck were replaced with plain glass, although this is said to have been done after the bus entered service with ECT, and a standard Edinburgh three-piece destination display was fitted at the front, and a route number blind display at the rear. It is also alleged that Edinburgh used the bus for fuel consumption figures, comparing a small engined bus with the likes of the AEC 9.6 litre and the Leyland O.600. If you know more about this interesting experimental bus, please write and let us know.

JOURNAL No.7

David Burnicle's article was very well received, with many complimentary comments. Unfortunately we ran out of space and not all the pictures were published, so here is one that got away. It was mentioned that it was the intention of Leyland Bus to evolve the body system in low and higher floor forms to suit the Royal Tiger and one of the proposals was a quasi-double-deck coach with a low mounted rear saloon. Here is an artist's impression of what it would have looked like! (Leyland Bus)

JOURNAL No.7 - ERRATUM

We must apologise for an error on page 48 of Leyland Society Journal No.7. The disc containing the photographs for the article on Sutherland Transport contained the final photograph shown, although this picture has no connection whatsoever with the subject of the article. It is in fact a special Octopus, one of only eight produced, for use on airfields. The next Journal will contain a full explanation. Once again, apologies to our readers and to Gordon Baron, author of the article.

SINGAPORE MYSTERY

We have not been able to identify this Leyland Tiger, the only one ever to run in Singapore (The Lion City!) It was not sold from Leyland to Singapore, so we can only assume it was obtained from New Zealand or Australian sources. Can anyone help?

(Photo Fred York)

USING LEYLAND BODY PARTS

by Allan T. Condie

Further to D. R. MacGregor's letter in Torque No.29, I can certainly confirm that Central SMT L33, 35,37 at least were rebodied by Leyland and photographic evidence confirms this. One interesting point about Central SMT's Leyland bodies of the period is that there were two distinct styles, those with square window pans, and those with rounded corners at the bottom using 'Claytonrite' glazing. Again from photographic evidence it would seem that L115-134 had the latter and L135-149 the former.

CSMT L127 is from the batch L115-34, (VD 9237-56) TD5s of 1938, which have the radiused lower corners on the window pans of their Leyland lowbridge bodies.

In contrast, CSMT L138 seen right is from the batch L135-49 (AVA 360-74), TD5s of 1939, and it has window pans with square corners top and bottom. See also the picture on page 29 of Torque no.27, which shows a rebodied Leyland L33.

CSMT L171 is a Leyland TD7 from a group of 14 Leyland bodied examples new in 1940, and which were very similar to the previous batch on the TD5 chassis.

The use of Leyland body parts was more common than one would think, as frame components were available as spares. Inspired by the redoubtable George Bissett of Alexander/DUT fame, the 1945 Alexander single deck body was pure Leyland under the skin. We had a visit from some Australians at Lathalmond in September and the question of the Leyland bodywork on Melbourne TD5s came up (of which more later). We looked at Jasper Pettie's other LT5A which is in its unrestored state, and the framing is pure cross-braced Leyland double deck style: even the window pans are the same dimensions as the standard Leyland ones although in this case they are in alloy. The pictures opposite show bodies fabricated with Leyland parts.

As far as Alexander's own double deck bodies were concerned, work was started on building a single experimental body using Leyland parts in 1939 to contract number 2061. Further information on this is scanty, but it is known that Alexanders had intended to body 25 TD7 double deckers in 1939 but in the event the order reverted to Leyland. The next stage of course was the completion of bodies sent up to the Drip Road works, Stirling, from Leyland, and finally Alexanders went the whole hog and built their own 'Utility' bodies to Leyland design. One of the body shop staff at Brown Street (now deceased) told me that these bodies under the skin were identical to the Leyland ones as they used the same parts when repairs were due. The same is true of the post-war design up to 1950, apart from the rear end, which was modified by Alexander in the light of their own experiences. Complications arise here as some earlier bodies were also rebuilt to that design.

In 1944-5 a group of pre-war CSMT Tiger TS7 chassis were rebuilt as Titan TD4, as shown by L180 (formerly T77, VD 7334). Despite its "utility" features, the body structure shows it is based on Leyland metal framing.

We are fortunate in having two Leyland Titans in the Museum at Lathalmond, Alexander R266 and SMT J66. Now J66 is interesting in that it is a TD5 chassis which was a Leyland hack released in 1942, the body being finished at Drip Road. David Griffiths from the Australian Museum at Tempe pointed out the subtle differences between the TD5 and TD7 on his visit here. He is restoring a Sydney TD5 with Waddington all-metal body of local design.

Discussion with our friends from Oz proved that the Melbourne Titans were pre-war Leyland bodies widened from 7 feet 6 inches to 8 feet. Where confusion arose is that they called them "composite" bodies as they have metal frames with timber fillets to fix the panels. We would call these "all-metal" if the main framing

CIE N31 is a Leyland LT5A new in 1936 to the Dublin United Tramways whose chief engineer had been recruited from Alexanders. The body incorporates Leyland double deck body parts.

(All photos with this item are from Allan Condie's collection.)

A pre-war Lion LT5A with an immediate post-war Alexander body . The chassis of P716 came from ex Lanarkshire F25. It was fitted with this new B36F body and a 7.7 litre AEC oil engine late in 1945. The framing is of Leyland origin.

was steel or alloy. This is due to the fact that the all-metal Waddington, Comeng and Clyde bodies in Sydney had the panels directly attached to the steel frames. Alexanders used the term "all-metal" in their records where the framing was all metal apart from the fillets, and "composite" where framing was timber, although in their case steel reinforcement was included.

Finally, that great debate over the PS1 and PS1/1. Again our friends who worked at Drip Road told me that PS1 chassis arrived in both forms, with chassis drop frame extensions and without. The first job where there were no extensions was to burn off the rear end of the chassis and fit extensions, which were available from the Leyland factory as spare parts, although Alexanders had their own different source for these.

SOCIETY SALES ITEMS

To find out what items the Leyland Society has for sale, you only have to look up the Society Website on www.leylandsociety.co,uk

LETTERS TO THE EDITOR

From Richard Gadsby, Liversedge

During the course of researching the activities and vehicles of the erstwhile Scottish coachbuilder McLay's Garage Ltd, of Kirkintilloch, I managed to obtain some interesting photographs from the East Dunbartonshire Information and Archive Department, for which I have received permission to reproduce.

McLay's had been in business since 1878, starting off as blacksmiths and engineers, and moving into traditional garage-related activities and vehicle building in the early years of the 20th century, with some buses being built as part of their production. In the early 1970s, however, McLay invested in the manufacture of specialist passenger-carrying vehicles on Leyland goods chassis, being the first Scottish bodybuilder to do so, and such vehicles were built in some numbers until the company's demise in 1983.

Three photographs illustrated the range of vehicles produced – firstly, an unregistered coach which may have been **JSN 178L**, a Leyland 650TR chassis with a 20-seat McLay body which passed to Armchair of Brentford, before it saw further service with Hugh Sinclair & Company in Shetland from 1977 to 1980. McLay did not achieve much success with this model for the traditional P.S.V. market, which is a pity, but had more success in the "welfare" or local government market. The second photograph showed **KMS 139S** with a type of design of body that was sold largely to Scottish Authorities and other welfare organisations. Some of these were also later supplied on a sub-contract basis to Wright Jenkins Limited, a Scottish-based subsidiary of Wright's of Ballymena, but that's another story.

Perhaps most intriguing of all is the third photograph which shows a contractors passenger-carrying vehicle for Lilley,(contractor), with box like passenger compartment. One wonders if this was convertible to a goods vehicle? Does anyone have more information on thes vehicles, or others supplied by McLay to contractors?

A Bathgate built Leyland chassis with bodywork by McLay. KMS 130S is of a type widely used by school and welfare authorities. (EDIAD)

From Frank Wright, Rochester

Many thanks for the latest edition of Leyland Torque, as interesting as ever. I have a model of a Birch Bros. 'Airflow' (see Torque No.28, page 31). This is slightly larger than a Dinky Toys coach and I believe it was made in 1937 by a firm Taylor & Bennet who had a die cast toy and model factory not far from the Birch Bros. Body Building factory. I presume that they obtained the details from them. I purchased this model in 1937 for 1/6d (9p) and a similar model went for several hundred pounds at a die cast model auction a few years ago.

My model is in Birch Bros. colours with the half moon logo but with no lettering. I fitted a new set of tyres on it some time ago. (The destination **London** is included in casting). I believe the real coach had a sliding roof and I rode on a similar model on one of the Birch Bros. routes from Welwyn Garden City to Luton in the late 1940s.
(Frank Wright)

From Alan Townsin, Steventon

Birch Bros. Ltd. bodywork had a distinctive character, in some ways the company behaved rather like a member of one of the big groups, but in others it reflected its fiercely independent status and long history. To the best of my knowledge, no bus bodies were built for other operators after the 1939-45 war, nor do I think there was any attempt to obtain such business even in the days of big demand in the late 1940s.

Much earlier, in the 1920s, it had been quite a regular supplier of bodies to some of the BET companies and to other London area independent operators, in the latter case perhaps the likeliest alternative to Christopher Dodson until the creation of London Transport in 1933 shut the scope for such activities down, as well as Birch's own London area services – so effectively Birch bodywork thereafter was built only for its own use. The only exceptions that come to mind were a pair of 24 seat sea-front buses for Devon General on Bedford WTB chassis in 1937.

In the 1970s I got to know John Manley Birch, who had been general manager in the post-war era and later managing director, in his capacity as a leading light in the operators' association, CPT. He was much respected, even feared, by some of the staff but I found him approachable, with a lively sense of humour. I rather regret not asking him about Birch bodywork, for I think it was probably he who was responsible for the design of the distinctive bodies on the PD1s and possibly influenced the pre-war 'Airflo' styles, though he'd then have been quite young. In the early post-war world, the front-entrance double-decker (quite widely favoured in the mid-1930s) was all but dead, only Birch and Barton choosing this layout for new vehicles, in both cases on PD1, though Barton's were built by Duple.

I think the ECW single-deck bodies were obtained largely because they were available, and the 'look-alike' Birch bodies on the Lion LT5A and LT7 were simply meant to conform to the style set by the PS1 buses. By then it may well be that the economics of building bodies in small numbers in Kentish Town, NW.5, may have been too daunting to continue. The six Guy Arab III with 6LW engines and the four PS1/4 with Willowbrook H27/26F bodies all had 17ft. 6in. wheelbase, stated in an article by John Birch in *Buses Illustrated* No.12 to be on longer wheelbase chassis "to give improved stability on route 203, which traverses some winding, narrow lanes".

I agree that the idea of the PS1/4, K223, exchanging chassis frames with the PD1, K187, seems to make no sense – maybe it was more accurately a case of the swapping of units other than the frame to give K187 a better set for its later life with the new Met-Camm body.

From Tony Hall, Birmingham

Another edition of Leyland Torque – another feast of goodies! Following the picture of Birch Bros HLY 483 on page 33 of Torque No.28 I am enclosing a picture of HLY 489. If you compare the two vehicles, HLY 489 has a 'BIRCH' name in the front dome. The livery is also different in that on HLY 489 the roof is painted a dark colour, presumably green. There are also route details for service 203 London, Hitchin, Bedford, Rushden above the lower deck windows. I think that the photo of HLY 489 was taken when the vehicle was new. Note the gleaming radiator.

A view of HLY 489 in its distinctive livery. Would the colouring of the advertisement also have been in Birch house colours?

From J. Nolan, New Brighton

Below are two photos taken at the Arley Country Fair and Horse Trials on 29th May 2005 of a Leyland Roadrunner and a Leyland-DAF 45 in use as horse boxes.

From Andy Dingwall, Ludlow

It was very pleasing to see the Birkenhead Corp. Massey bodied PD1 on page 48 of Torque No.26. I can give you a bit more specific information about the design and the rear bumper arrangement; the vehicle in the photo is of course of No. 105, PD1 chassis no 460599 which entered service in December 1946 and was withdrawn in May 1960. It has been valiantly restored and as far as is known is the only survivor with this type of Massey body. A total of 45 PD1s with this body entered Birkenhead Corporation service between October 1946 and October 1948. The basic body design

was a continuation of that supplied on a batch of forty TD5c which all entered service in 1939, chassis nos. 302617-56. All such deliveries incorporated a one piece three strip rear bumper. Thereafter bumpers were discontinued and I believe were removed because some "jobsworth" decided buses with bumpers exceeded the permitted overall length. Deliveries of Guy and Daimler buses continued with this same style of Massey body until 1951, when the first 8ft. wide buses arrived, twenty PD2/3s with Leyland bodies. Thereafter Massy Bros introduced steel framework and the 1939 based "streamline" style was discontinued.

The 1939 design did look very smart; in addition to the external beadings below the windows the TD5s incorporated interior luxury touches such as stainless steel window surrounds, lower deck ceilings covered in "Alhambrinal" – giving a sort of graduated blue sky effect –and also in the lower saloon square section lantern type lights with chrome top and bottom cappings, fitted to each window pillar. Externally, there was gold line painting in addition to the chrome beadings and the centre section of the roof was painted white – which didn't last beyond the first repaint. Except for the chrome external beadings, none of the luxury touches were carried over to 1949.

A photo of two of the 1939 series of TD5c supplied to Birkenhead. They are seen at Liverpool Docks (a train on the Liverpool Overhead Railway may be seen on the left) and are shown after the rear bumpers had been removed. Nos.307 and 317 (BG 7729/7739) are working on contract, but 317's blind shows "Engaged" rather than the more usual "Private."

(Norman N. Forbes)

From Cyril McIntyre, Dublin

Having researched the CIE Manager's files from 1945 to 1975, it is clear that there was a very close personal relationship between Frank Lemass of the CIE and (initially) Henry Spurrier but later also with Donald Stokes. This of course had its origins back in the Dublin United and Irish Omnibus Co./Great Southern Railway days, when Griffith of the IOC/GSR had good relations with A.A.Liardet and Pease, and also Reynolds of the DUTC similarly had dealings with Liardet and Pease. Reynolds also was a personal friend of Walter Alexander, hence the presence of George Bissett in the Dublin United from 1936 to about 1942. Lemass was Accountant of the Dublin United, and when CIE was formed in 1945, Reynolds was its first Chairman and Lemass the first General Manager.

Leyland Torque continues to delight and surprise with every issue.

(Cyril's letter ties in with Allan Condie's item on page 35 (top photo). At the outbreak of War in 1939, Dublin United had an ongoing programme of mounting bodies built from Leyland parts on Titan chassis. Wartime restrictions meant that more body parts than chassis reached Ireland, hence some "Leyland" bodies were used on non-Leyland chassis, and double-deck units were used in single deckers.)

From Philip Groves, St Leonards-on-Sea

In Neil Steele's letter concerning Leyland Fire engines (Torque Mo.28), Neil states on page 40 that it would be interesting to know when Rees-Roturbo stopped supplying electric motors and control equipment for Guy trolleybuses. I have made a study of tram and trolleybus traction equipment over many years and my researches indicate that the last vehicles to be built with Rees-Roturbo motors were Wolverhampton 218-221 which were Guy BTX type new in 1935. They did have two batches of Guys with Electric Construction Company (ECC) equipment in 1934, five BTX type, 99/200-3, and four BT single-deck, 210-213 in 1934. Other Guy operators had taken their final Rees-Roturbo equipped vehicles in 1934. I hope this note is of help.

From Malcolm Margetts, by e-mail

Once again an excellent issue of the Journal, No.7, and I have several points for your interest.

Page 4 chassis X247/825. The LNER, quoted as first user in 1912, was only established in Jan 1923, following the amalgamation of several companies, principally in England: the Great Northern, the Great Central, the Great Eastern and the North Eastern. I suspect that this chassis was delivered to the North Eastern, one of the major constituents of the LNER. Their routes from Berwick (N) Carlisle (W) York (S) and Hull.

I can say with certainty that the Carter Paterson preserved Leyland X type visited the Apprentice Training Centre for examination and minor attention, between March and September 1954 while I was attached to that department. The full overhaul followed in the centre (affectionately known as the Pen – Dept No. 721) in 1955-1956. Mike Lowe was in "The Pen" about 12 months after me, and may have worked on it, or be able to confirm dates. Interestingly at either the 1969 or 1970 Brighton Run I drove the vehicle from Croydon to Crawley, sharing the responsibility with the official driver from Leyland (I seem to recollect that it was Peter Dawson, but I'm not certain of this.) It was a very cold wet windy November day and after an hours driving the stop at Crawley was very welcome. How previous generations managed a full 9 hour day in similar circumstances is difficult to comprehend.

When my parents moved from Birmingham to Lancashire in April 1950 they moved to a small village, New Longton, 5 miles NW of Leyland where we lived in Chapel Lane. Just across the road from us was a Mr. A.B.Chadwick, he had a Hillman Minx reg. no. NTC 720. One day I was cycling along Chapel Lane, paying too much attention to a passing Brush bodied PD2 when I cycled into the back of NTC 720 parked at the kerbside. Mr. Chadwick heard the noise and was so quickly on the scene to investigate, and promptly expressed his views on my cycling ability. Strangely there was not a mark on the Hillman, but my bike had a permanent bend in the frame and new forks were required. Understandably I could never cycle without a hand on the bars thereafter, the bike always wanted to mount the kerb.

In the economies of post war Britain the GPO could not provide a telephone line to our home, and Leyland Motors wished to have my father connected up. After weeks of uncertainty the line was connected with very little warning, but we quickly

discovered that it was a shared line with Mr A. B. Chadwick. These arrangements had apparently been agreed between LML and the GPO without reference to either party, and when ABC discovered this he was very angry indeed. This was really the cause of much embarrassment because the phone could only be used by one party at a time, but to check if the line was free you had to lift the receiver and this disturbed the other party's call. This had to be endured for several months and was the cause of much friction, I was forbidden to use the phone whatsoever. My father was always a very stout supporter of ABC's output and we used to read the weekly press hand-out sub-titled "for favour of publication", with much enthusiasm.

I found the article by David Burnicle very interesting, covering the period 1977 to 1987. Strangely I left Leyland just at the time that David started. It reinforced the view that I hold that political interference and resources diverted away to the car side of the group, was more to blame than the often quoted industrial relations, for the break-up of that once proud company.

From Roy Marshall, Burnley

Another enjoyable Journal full of interesting articles. A couple of points – Page 21, GK 442: I remember when a dark coloured headlight was a fairly common sight. It was a fog light with an orange "filter". This appears black when non-panchromatic film was used, Selachrome or sunshine.

Page 29, A499 MHG, the 593 service is LEIGH, Hindley Green and did not run into Wigan proper. Leigh is within the Metropolitan Borough of Wigan.

From Garry Ward, Ayr

I enjoyed your article on the Premier Line Leyland single deckers in Journal No.7 and was interested to discover these buses actually had Leyland bodies. From previous correspondence, you will gather that I have a particular interest in Western SMT and I can add a little to your outstanding query. From extracts taken of surviving company cash books, the buses were all purchased by Western from Leyland at a price of £1030-9-6 each, so it's fairly certain that, given the set price for them, all would have been fitted with oil engines by Leyland prior to the sale. As a matter of interest, the route panel above the destination box was adapted by Western to carry an illuminated fleet name panel. Some of this batch were later sold to parent company SMT with the transfer of Airdrie area services (ex Midland) in 1935. I understand that some of these vehicles did visit London periodically on Western's prestigious express service from London though, sadly, I have never encountered any photographs of these on the route.

From David Hardy, Bury St Edmunds

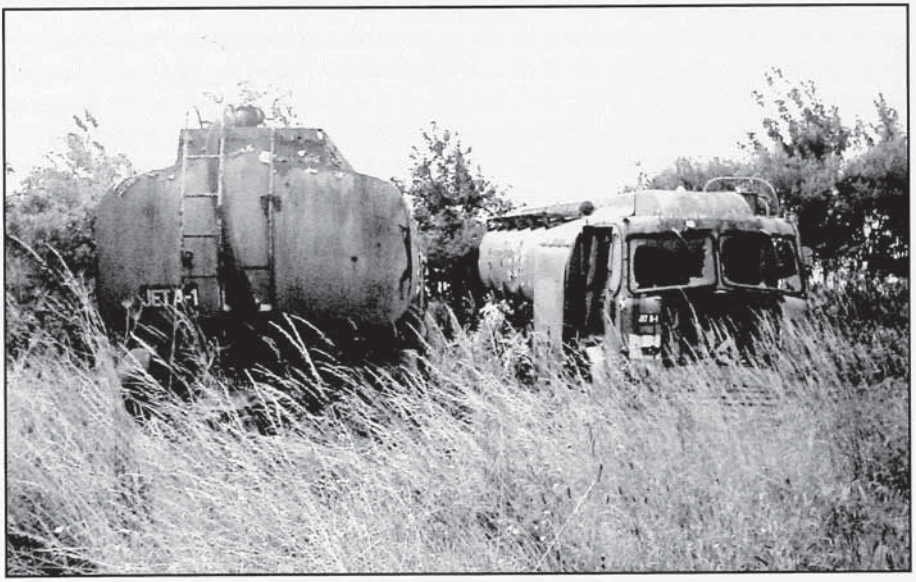
David has sent this photograph (opposite page) of two Leyland Hippos "in the undergrowth". He has acquired one of them for restoration. They started life as aircraft refuelling tankers, being part of the fleet originally used at Stansted Airport. David would be interested in hearing from any member with information on these – his address is:

West Glebe, Risby, Bury St.Edmunds, Suffolk IP28 6RQ.

ooo 000 ooo

From Paul Savage, Belfast

I thought some of your readers might be interested in this photo two of the dwindling number of Leylands in the province of Ulster. Left is Tiger TRCTL11/2R No.340 (DXI 3340) with Alexander (Belfast) body, and right is No.339 (BXI339), a Leopard PSU3F/4R which also has Alexander (Belfast) bodywork.



From Bill Cowan, New Zealand

Just a note to say how much I continue to enjoy the Society's magazines and congratulations on the standard of presentation and article interest which you and the team maintain.

In Torque No.28, you mention Bill Richardson's death. Bill was very well known and respected not only in the transport industry but also throughout the wider community. He was a staunch supporter of his native province Southland, and gave moral and financial support to many worthwhile causes within the region. His passing has been keenly felt by members of the vintage vehicle movement within New Zealand. His truck museum is quite unique. Housed under cover in purpose-built buildings he collected vehicles of just about every make that had ever turned a wheel in the country including a few that hadn't. Not only did he collect trucks but also examples of the trucking 'infrastructure' like petrol pumps, oiling equipment and the like. Some walls are decorated with truck radiators including some massive Leyland examples from the 1930s.

I had an opportunity to visit this museum five years ago. At that time Bill had two Leylands on display; a bonneted Comet and a twin steer Leyland with an Ergomatic cab. In conversation he mentioned that he had some earlier Leylands 'out the back' awaiting restoration.

As far as I know the museum doesn't have regular opening hours but is opened on request. If any Leyland Society members are in Invercargill I suggest they contact Southern Transport Ltd and enquire about gaining entry to this wonderful display. I can only hazard a guess at the number of trucks on display, perhaps upwards of one hundred? - and they have all been maintained in their owner's original colour schemes.

From the Editor, Mike Sutcliffe

Ron's letter on page 36 of Torque No.29 refers to the Manchester "piano front" bodies which were built to a low height with upper deck gangways running down each side of the body. This layout was designed to get round the Leyland patent for the Titan body, where the patent was for one step when looking across the body, i.e. the offside gangway being lower than the main upper deck floor level. By having two gangways and therefore two "steps", Manchester got round the patent and this saved having to pay Leyland Motors £50 per body.

That's all very well but how did the upper deck passengers get onto the near-side gangway? At the front of the vehicle there would no doubt have been a step up over the driver's cab and the canopy, but what about the back? – did the gangway go across the very back of the vehicle or was there a row of perhaps three seats at the back with the gangway crossing the bus in front of those three seats thereby ending up near the top of the stairs? The former idea seems to be impossible because there would be no way of connecting that transverse gangway with the staircase, if the latter there must have been a small landing, possibly one step down, at the top of the stairs, but, photographic evidence points towards a sunken gangway right at the back of the bus, so, how did it all work?!The contempoary AEC Regent had a shorter wheelbase thereby giving more platform space within a 25ft. overall length. This would have given

more clearance for a transverse gangway upstairs and possibly was the whole reason for having a shorter wheelbase than the Titan.

One other point worth noting is that the word lowbridge was not originally applied to the Leyland body on the TD1; the word was then not in use. The proper description for the TD1 "lowbridge" body was the "Titan". Leyland Motors then invented the name "Hybridge" when they introduced the conventional central gangway double deck body on the TD1 and in Leyland records these two versions were always referred to as the "Titan" and the "Hybridge". Following this, it was no doubt the natural thing to call the lower height vehicles "lowbridge" and this probably how the words were derived. Leyland continued to use their own spelling "Hybridge" right up to the end of body production as opposed to the more general use of the word highbridge used by other manufacturers and operators.

Manchester No.214 was photographed in service on route 53. It has a body built by Brush.

A photo of the interior seems more spacious than it would have been in reality. Note the staircase which projects into the area of the open platform, and the width of the bulkheads giving a narrow entrance to the saloon.

SOCIETY SALES

NEW BOOKS We expect to send our next book in the Leyland Fleet Series to the printers in the near future. The new title will be the **Ribble Double-deck Coaches** built on Leyland Titan and Atlantean chassis (with the final batch on Leyland engined Bristol VRLL) and has been written by John Howie. It is well illustrated in black and white, with a full colour laminated cover. It reveals how Ribble pioneered the use of double deck coaches, how *avant-garde* the company was in choosing the Atlantean PDR1/1 for motorway services, and why the successors, the VRLLs, had such short service lives. The book will sell to general readers at £8.95, but the price to Society Members (quote your membership number when ordering) will be £7.00 post free. Cheques/P.O.s payable to "The Leyland Society Ltd." Delivery after Christmas. Orders to David Bishop, Sunnyside, Whitchurch Road, Aston, Nantwich, CW5 8DB.

SOCIETY CARDS Available now, and well in time for Christmas, are packs of cards depicting a snow scene with a Leyland Octopus of British Road Services. The picture is a reproduction of a painting by James Downie, and is illustrated (here in black and white) below.

They are 21cm. x 15cm. (approx. 8 inches by 6 inches for those old enough to remember the British Road Services fleet) in full colour on good quality card, and they come with envelopes in a pack of five at £3.99, post free.

Please send your order to Society Treasurer David Berry, 5 Spring Hill Close, Westlea, Swindon, Wilts. SN5 7BG. Cheques and postal orders to be made payable to "The Leyland Society Ltd."

SALES & WANTS

FOR SALE

Leyland Spares – Nick Warner of Warner Coaches (latterly Rainbow Buses) from Tewkesbury is selling off a large quantity of Leyland Tiger, Leopard and National components, propshafts, TL11 engines, radiators, axles, etc. Some 600 engine parts from early 1960s onward. Give Nick a call on 07778 664434 or e-mail nickwar@bt.internet.com to discuss your requirements. The site is to be cleared by the end of the year.

Leyland Parts – mainly T45 cab bits, like the front panels, steps and an engine for a Lynx and AEC 760 engine. Also a grille for a Terrier. Please contact Dave Bryant on 01603 451121.

"Retired" Leyland owner has for sale to other Leyland owners various tools for 1950-1960s lorries etc. - Lake & Elliot 8-ton jack, original equipment with 60s Leylands, wheel nut spanners and bars (Whitworth and metric), T45 kit in canvas roll(unused),"Fait" kit in box, pair of punch bars for split-rim wheels, front tow pins for T45 and 50'60s Atkinson, box of Whitworth spanners, some stamped "Gardner", Leyland cast front hub greasecap (new) etc. Offers for any or lot to Eric Muckley on 01925-265598, or s.a.e. for full list to 13 Sandy Lane, Stockton Heath, Warrington, WA4 2AY. Will deliver up to 40 miles.

WANTED

Photographs - Can anyone please assist with photos of these four Leyland buses that later found their way to Berkshire operators?

DOV 973 Lion LT8/ ? body, C37-, new 2/38 to Stockland, Birmingham, later with Brimblecombe, Wokingham.

AOV 272 Tiger TS7/Burlingham C33F, new 1935 to Smith, Birmingham, later with Brimblecombe, Wokingham.

WP 6206 Lion LT5A/Burlingham C33F, new 5/34 to Burnham, Worcester later with Newbury & District M.S.

YV 5499 Lion PLSC3/Birch C32F, new 5/28 to Birch Bros, Kentish Town, London later with Newbury & District M.S.

I have been after these for many years, so please check your collections! Costs repaid. Paul Lacey, 17 Sparrow Close, Woosehill, Wokingham, Berkshire, RG41 3HT.

Leyland Journals, - for **1965** June, July, August, September, October, November & December

for **1966** January, February, March, April, May, June, July, August, October, November & December.

Please contact Chris Swindlehurst on 01539 562781.

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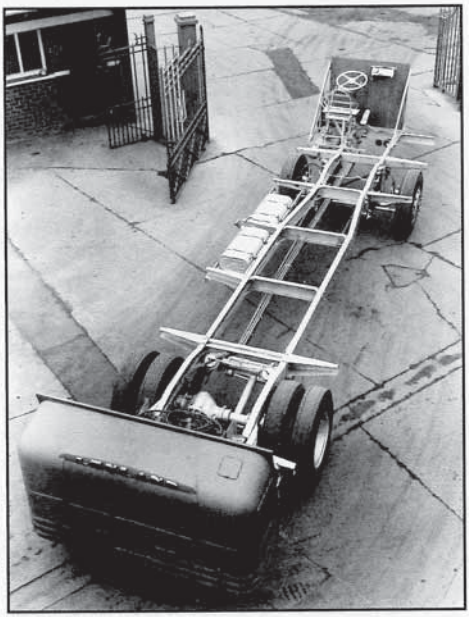
To find out what items the Leyland Society has for sale, you only have to look up the Society Website on www.leylandsociety.co,uk

TAILPIECE



It is getting on for fifty years since this rear view became familiar. Here is an Atlantean chassis about to leave Leyland. But look carefully: it is left-hand drive, and with chassis number 593073 is probably the first such to be built. What is less clear is that it is a single decker (certainly the first) and it is destined for the Israeli Leyland Agency C.N.E.C. (Consolidated Near East Company). Is there a photo of this bus in use in Israel? We do not even know if it was bodied or put into service. Sometimes "one-off" exports such as this were inspected and never put to good use, and not even repatriated.

LEYLAND TORQUE

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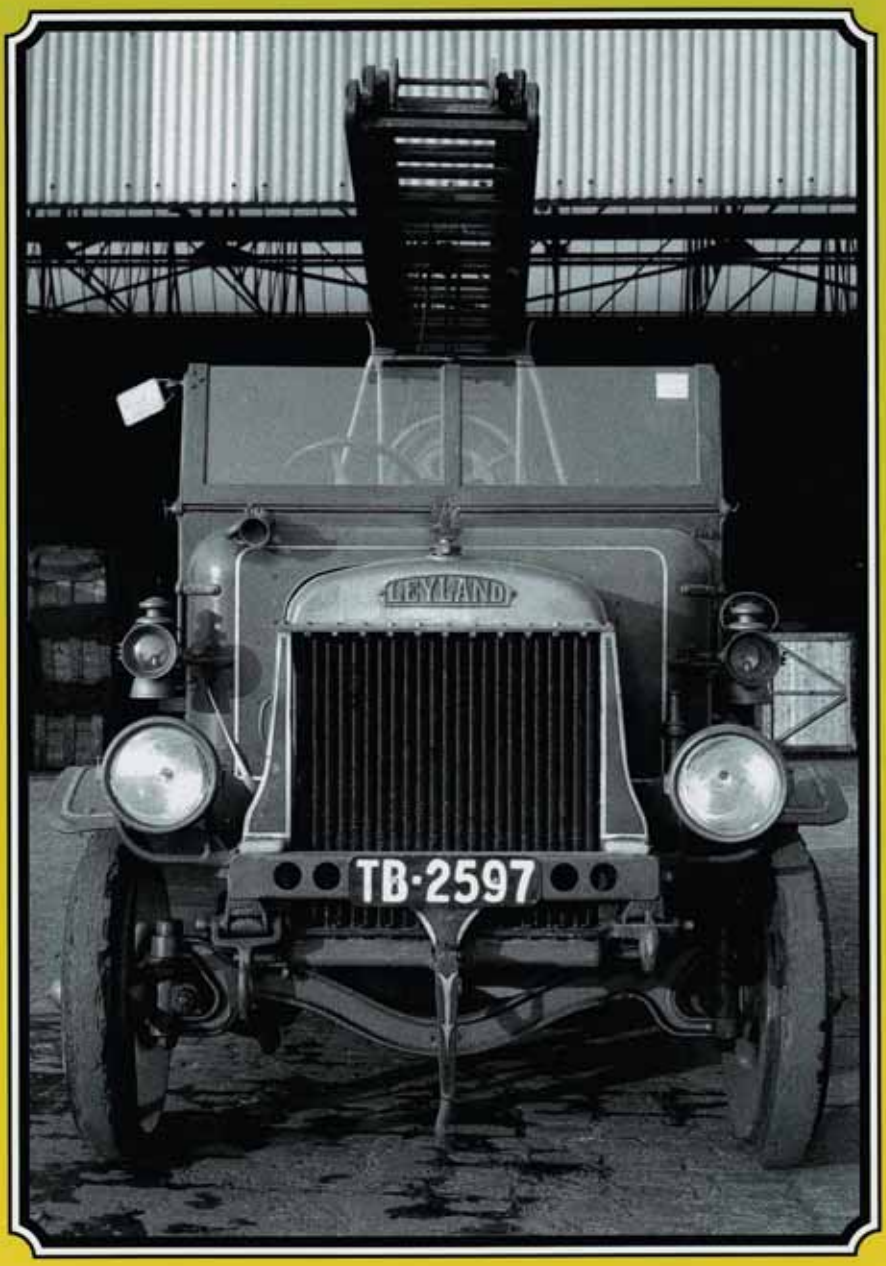

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