

# THE LONDON BUS PRESERVATION GROUP LTD

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COBHAM BUS MUSEUM REDHILL ROAD COBHAM SURREY KT11 1EF COBHAM 64078

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2.

1&2. London Transport AEC Mercury Tower Wagon—  
see notes in Vehicle News.

3. Recent photograph at Cobham.



3.



FROM THE CHAIR

I came away from the AGM feeling reasonably happy, (and the pub afterwards feeling even happier), that the committee and the members are now pulling in the same direction. The granting of Charitable Status is now imminent and, although there will be discussion on the form of administration for the Trust and the Company, and the relationship between the two, the will to talk and compromise is there.

At the AGM, John Bedford speculated on the idea of selling the building at Cobham and finding somewhere else with more potential. This was seized upon by many members present with a fair degree of enthusiasm. I have already heard it said that there is no point in improving the place if we are going to move out. Now this particular kite has been flown, it is important that we sort out our position with the Planning Authorities as soon as possible. If they will not sanction change of use for the land, we ought to re-submit plans for an extension. At the very least we should seek to rebuild the storerooms at the lake-side of the building to make more effective use of what we have. At present we are having to find room inside for vehicles cut up for spares that have stood outside for over thirty years, at the expense of vehicles in good condition that would benefit from undercover storage.

The AGM also threw up a few ideas to improve the newsletter and some of them are incorporated in this one. Attached to this newsletter you will find an 'Engine fault diagnosis chart' which I trust will be useful to members. The next and subsequent issues will be under the wing of Colin Wickens who writes as follows:

"I would like to make an announcement, and a plea. The announcement is that I, Colin Wickens, will be trying to get a regular newsletter going. After this issue I hope to have the next by the end of April, and from that issue the newsletter will be numbered. This is to let members keep a check that they do not miss any.

I will be starting the "ads" column, the for sales, wanted, etc., so if anyone would like to place an ad, in April's newsletter would they send all details to me at:

□ Brent Close, Chatham, Kent, ME5 OTG

or if preferred to Cobham, marking the envelope 'Newsletter', please. The advertisements will be free to all members, but to non-members, or any one using the service for business purposes there will be a charge of £2.00.

Now the plea - while you have your pens out, how about having a story from you. It can be about your bus, the history of it, or something that had happened to you while out in it, on the way to or from a rally, recent or a long time past. Anything you might like to share with other members, I'm sure it would make very interesting reading."

We have already received a few reminiscences from Alan Cross and Roy Gould for future publication, so get scribing!

Colin has also taken over the duties of Membership Secretary in co-operation with Paul Claridge and his computer. If you have not renewed your subs, this is your last newsletter. If you have renewed your subs. and this is still your last newsletter, at least, like all big organisations, we can now blame a machine for our mistakes.

VEHICLE NEWS

Due to the recent inclement weather there is not much to report on progress on Group Vehicles, so the opportunity was taken to decorate the mess-room. It now features a sort of Tudor-Regency style, - carpet slippers only please. As a result of suggestions received at the AGM on newsletter content news on vehicles passing through the trading will also be included.

GS 1 has been worked on since November. It has passed an MOT and received attention to the body including new wings and spacers, a favourite area of corrosion on this model.

RF 319 has been bought by us from Gorray. Apart from slight tidying up of the body, the cylinder head gaskets have been changed and MOT passed.

RF 480, Glenthorne School, was in for engine repair and MOT.

RCL 2223 was in for repair and MOT preparation.

RTL 1163, which has been around for a long time in the care of Graham Burgess, has now been sold to Ted Brakell and is undergoing repainting and MOT preparation.

Underneath all the green moss and slime it has one of the straightest RT type bodies seen here for a long time. When refurbishment is complete, we hope it will be running on the Open-Day free bus service.

RF 177 blew up its engine recently on the A3 and was towed into Cobham. Looking back into our records I see yours truly worked on this bus in July 1975 when I was self-unemployed at Cobham. Number 1, 3 and 5 pistons were changed then and the bus sold after passing an MOT on 27th July. I hope there is no question of a guarantee claim on this.

Other vehicles in for MOT were RTL 1348, RT 4780 and RF 687.

A non-LT vehicle was 90HBC, an ex-Eastbourne PD3 which had a gearbox change, ex-stock, which shows the multiplicity of spares we have at your disposal. Our cover vehicle this time is from the service vehicle fleet, 89Q, previously number 201 in the trolleybus service fleet. It is an AEC Mercury with a 4 cylinder petrol engine, fluid flywheel and pre-select gearbox, similar to the details in the Monarch publicity leaflet attached to this newsletter. The Monarch, suffix 'N' in the service vehicle fleet, was a heavier duty chassis than the Mercury.

The tower wagon was bought by us from Norman Ancomb. At present there is no tower and the cab is semi-derelict with some of the woodwork replaced. Mechanically it is complete with a good set of tyres. If only we had the room it would make a nice addition to the collection.

RT 2958, the LT radio trainer, has been bought for preservation by Mr. John Hammel. I understand that it is in reasonable condition apart from the roof which has numerous aerials on it resembling the craters on the moon, and almost a complete set of seat frames and cushions are required.

B 43, 'Ole Bill', not to be confused with the chairman or the local constabulary, was revived for a publicity jaunt recently from the Imperial War Museum. I am informed that progress along the highway was careful due to the condition of the tyres, and that the engine also requires attention having suffered frost damage at some time. However, it is intended to put these defects right and use the bus for publicity in the future.



From the same era, S 742 has returned from Beaulieu for storage in the London area after having some work done; more details on this when they become known.

### BATTERIES

As from the 19th November 1984 the Chiswick Battery Shop ceased to build and recondition the traditional, unique LT pattern battery. There are conversion kits out for Metro and RM using Chloride type 722 and 721 batteries respectively, with DM to follow, also using type 722. The conversion kits include packing pieces, clamps and extra links. The RM will now have 4 x 6 volt batteries. The posts are similar to the LT type except there is no ridge to stop the bolt turning. Even if it were possible to put on brand new batteries now, within about five years there will be no replacements around, so it is imperative that you look after your batteries properly. It appears the date code on the last batch were S4, and future forays into scrapyards should bear that in mind.

The new batteries are date coded in the usual way. A reminder of the LT date coding system follows:

A capital letter is used for the month thus:

A January	D April	K July	P October
B February	E May	L August	S November
C March	H June	M September	T December

The year is shown by the last figure of that year. If you find a unit stamped A3 it could be January 1983, but it could also be January 1973, so a certain amount of caution is needed to be sure.

### AEC PART NUMBERING AND DATE CODE SYSTEM

I feel it may be worthwhile to go over the AEC part numbering system as it has been many years since I last covered this subject, and I am sure that many recent members may not be aware that knowledge of this can assist with spares identification. At least with AEC there is a logical system, (if Leyland has one I have yet to decipher it!).

On most AEC manufactured parts, as opposed to 'bought out' items, the part number starts with a letter, and each letter signifies the unit on the vehicle to which that part belongs. The list follows:-

A Engine, B Clutch parts (but not used since early 20's models),  
 C Pedal Gear, D Gearboxes, E Change Speed Gear, F Rear Axles, G Brake Gear,  
 H Starting Handle, I not used, J Clutch/Fluid Flywheels, K Cardan Shafts  
 L Front Axles, M Steering Gear, N Radiator Pats, O not used, P Bonnets,  
 and in later years, cabs, Q Driver's cab structure, R Throttle/Accelerator  
 Gear, S Fuel System, T Exhaust System, U Any experimental item, from an  
 individual part to a complete chassis (as in UMP 227), V Electrical and associated  
 parts, and also spare wheel carriers, W not used, X not used, Y Chassis  
 Components, Z Miscellaneous small parts.

The master list in each series is always a letter followed by three numbers e.g. A 204 is an RT engine. Some master lists exist as units and can be identified as such (Engines, axles, gearboxes) but some only exist on paper e.g. brake gear, as they are spread throughout the chassis and do not come together as a unit. There are also suffixes to the master lists but these signify only slight variations or build conditions, and I won't confuse the issue by going into these. The master (i.e. three-figure lists) are broken

down into sub-assemblies and these are given four figure numbers. Three and four figure numbers will not be found cast or stamped onto a part. They will usually be identified by a plate attached to the unit or sub-assembly.

Next comes the individual parts that make up the sub-assembly, and these will be the parts that are difficult to identify, as they are probably obscure lumps of shaped metal. The beauty of the AEC system when it comes to finding individual parts is that all the same items, regardless of model, are numbered in the same series. Thus we find, taking a few examples at random, engine pulleys are A217\*\* numbers, joints are A194\*\* numbers and so on. When a series of numbers reaches '99', the next number will be a 'stroke' number e.g. A19499 would move onto A1/19401.

As a test of the system, I have noted in the stores at Cobham three items with the following numbers stamped or cast into them.

i) F12884. The 'F' identifies the item as part of a rear axle. A look in any AEC parts manual lists all the parts in each section. In the 'F' section in the RF manual F12891 is listed. Turning to the appropriate page we find that F12891 is a R.H. brake camshaft, and that F12892 is a L.H. brake camshaft. We are now looking for a L.H. brake camshaft on an older model than an RF. A look in the Regent Three manual finds F12884.

ii) A56706 T26, and A56706 A19.. In this example we have found two identical parts but the numbers and letter stamped after the part number give us additional information as they are a date code. Attached to this newsletter will be an AEC Date Code Chart covering the period 1939 to 1972. The A number tells us to look at the engine master list, and the date codes tell us the first part was made in June 1964 and the second in January 1949. A look in the Regent Three manual finds the part described as a 'front locating washer' and it is part of the crankshaft sub-assembly A1/7607. I suspect we won't be asked for many of these!

iii) L21939. E30. Here we have part of a front axle dating from May 1971. Reference to the Regent manual finds L21940 and L21941 listed as L.H. and R.H. brake camshaft levers. Looking back to an earlier Regent III manual we find our part listed as a L.H. Brake camshaft lever.

London Transport have in the past used the same code letters as AEC but in a slightly different sequence. There is a four figure pre-fix to the number, as in steering parts, 3070M\*\*\*, heater pipes, 3091N\*\*\*, etc., LT numbers crop up where the item has been manufactured for replacement by LT. Nowadays, (on bought out parts), the trend is to use manufacturer's part numbers which is an advantage to us as it gives us the source of the part. For example, the fly-wheel gland which started life as AEC part number 81-2389, became LT number 3071J and is now LLE-F-524-H. (Llewellyn Gland).

So, if the part you want to identify has a number on it, the above information, plus reference to any AEC parts list, should help you identify it. If you still have problems contact Bill Cottrell at Cobham and with the help of our library we should be able to crack the code.



ENGINE WATTS OVERDIE

A. E. C. DATE STAMP CODE

JAN	A14 A15 A16 A17 A18 A19 A20 A21 A22 A23 A24 A25 A26 A27 A28 A29 A30 N30	1972
FEB	B14 B15 B16 B17 B18 B19 B20 B21 B22 B23 B24 B25 B26 B27 B28 B29 B30 P30	1971
MAR	C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 Q30	1970
APR	D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25 D26 D27 D28 D29 D30 R30	1969
MAY	E14 E15 E16 E17 E18 E19 E20 E21 E22 E23 E24 E25 E26 E27 E28 E29 E30 S30	1968
JUN	F14 F15 F16 F17 F18 F19 F20 F21 F22 F23 F24 F25 F26 F27 F28 F29 T29 F30 T30	1967
JUL	G14 G15 G16 G17 G18 G19 G20 G21 G22 G23 G24 G25 G26 G27 G28 G29 U29 G30 U30	1966
AUG	H14 H15 H16 H17 H18 H19 H20 H21 H22 H23 H24 H25 H26 H27 H28 H29 V29 H30 V30	1965
SEP	J14 J15 J16 J17 J18 J19 J20 J21 J22 J23 J24 J25 J26 J27 J28 W28 J29 W30	1964
OCT	K14 K15 K16 K17 K18 K19 K20 K21 K22 K23 K24 K25 K26 K27 K28 X28 K29 X30	1963
NOV	L14 L15 L16 L17 L18 L19 L20 L21 L22 L23 L24 L25 L26 L27 L28 Y28 L29 Y29 L30 Y30	1962
DEC	M14 M15 M16 M17 M18 M19 M20 M21 M22 M23 M24 M25 M26 M27 Z28 M28 Z29 M30 Z30	1961
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**ENGINE FAULTS DIAGNOSIS**

Colour of Smoke	CAUSE										CURE [in order of ease]			
	Smoke at full load and high speed.	Smoke at full load and low speed.	Smoke at light load and high speed.	Smoke at light load and low speed.	Loss of power.	Knocking over-run.	Smoke on engine	Poor starting.	Acrid odour.	Engine noisier than usual.		Engine quieter than normal.	Smoke at idle clears when running.	Smoke when cold. Pressurised water system.
BLACK	●	●											Max. fuel setting of the fuel pump high.	Remove and test fuel pump.
BLACK	●	●			●			●					Pump timing too advanced (or advance device incorrect).	Check timing. Change fuel pump.
BLACK	●	●	●										Blown head gasket pot to-pot.	Change gasket.
BLACK	●	●	●										Injector nozzles blocked.	Remove and test injector.
BLACK	●	●	●										Blocked air filter or intake.	Remove blockage.
BLACK	●	●											Injector nozzle lift excessive.	Change injectors.
BLACK	●	●	●										Injector pipes of wrong length or bore. Bore closed in at one end.	Change defective pipes.
BLACK	●	●											Incorrect nozzle type fitted.	Check if correct injectors fitted.
BLACK	●	●				●							Loss of cylinder compression.	Check if valves are sticking. Operation of valve gear. Change heads. Change engine.
BLACK	●	●				●		●					Pump timing retarded (or advance device incorrect)	Check timing, taking up backlash in drive. (D.P.A.) Change fuel pump.
BLACK/BLUE/WHITE	●	●	●	●			●		●				Injector nozzle sticking.	Remove and test injector.
BLACK/BLUE/WHITE	●	●	●	●			●		●				Nozzle sprays impinging on cylinder head.	Check if washer is fitted under injector. Check correct nozzles fitted.
WHITE	●	●	●	●						●			Blown head gasket. Cracked cylinder liner, cylinder block.	Change gasket. Change cylinder head.
BLUE										●			Engine oil leaking past valve guides.	Change cylinder head.
BLACK	●	●	●	●									Blocked air intake.	Change filter. Check trunking.
BLACK/BLUE	●	●	●	●									Turbo faulty.	Change turbo.
BLUE/WHITE		●											Engine running too cold.	Replace thermostat.
BLUE	●	●	●	●									Engine oil passing piston rings due to worn bores.	Change engine.



### FUTURE EVENTS

#### Group Events

#### CRICH TRAMWAY and MANCHESTER MUSEUM of TRANSPORT

Weekend visit - Saturday/Sunday 18/19th May. Transport by coach from Cobham. (Date and departure time to be confirmed).

BLACKPOOL TRAMWAYS - Weekend visit in connection with centenary celebrations. September/October. (Date and departure times to be confirmed.)

MEMBERS SUPPER AND SOCIAL EVENING London Transport Griffin Rooms, South Kensington. Wednesday 11th December 1985.

Information on these events from Group Secretary, J. L. Bedford c/o Cobham Museum or telephone 0932-64078 on Saturdays or Sundays.

#### RALLIES Etc.

Here follows a list of events where the organisers have taken the trouble to send us details of their shows:-

Rushden Historical Transport Society, held at Knuston Hall, Rushden, Northants. on the 4-5-6 May : SAE 8½ x 8½ to D. Worboys, Melton Road, Wellingborough.

Waldershare Vintage Weekend, Waldershare Park, Eythorne, near Dover. 29 - 30th June. Organised by the Dover Transport Museum Society. Details from Colin Smith, Alfred Road, Dover, Kent. Phone Dover 204612.

The Rotary Club of Uxbridge are organising the Uxbridge Auto Sunday on 14th July at Hillingdon Show Ground, Park Road, Uxbridge. Details from Mr. L.S. Dobbin, on Uxbridge (0895) 667 (business) or 924 (home).

#### SPECIAL OFFERS

There are no special offers this month, but remember, we still have in stock several hundredweight of PRE-DECIMAL fare charts. We would be delighted to sell some to make room to redecorate the office.

#### NOTE:

Since preparing this newsletter, we have learnt that Mr. John Hammel (Vehicle News) has withdrawn his offer for RT 2958, The LT Radio Trainer.