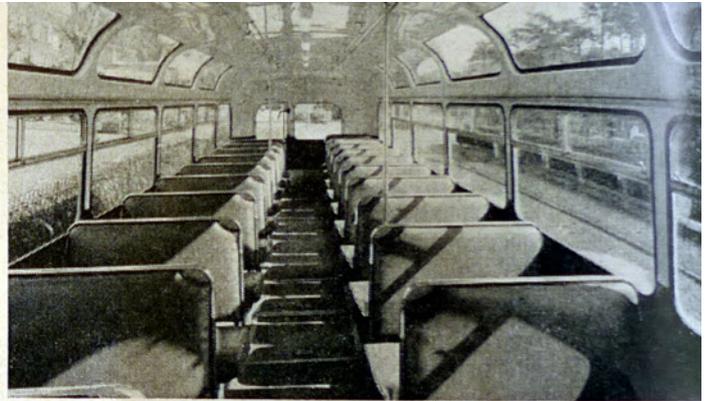
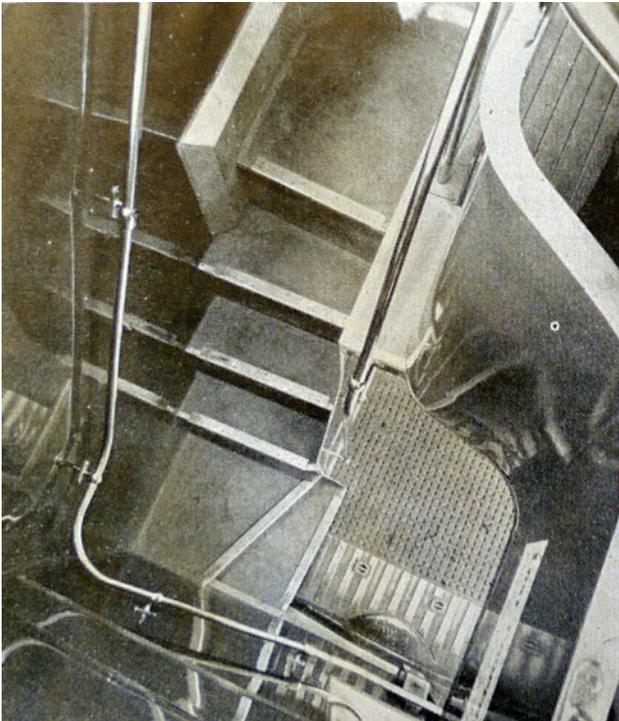


Preparing for tomorrow

(Bus & Coach article May 1964)

By Ronald Cox (general manager Bournemouth Corporation Transport.)



The interior of a Leyland Tiger Cub built in 1955 after re-decoration and reupholstering. Fluorescent lighting and Cronapress bell strip were included in the modernization scheme.

Looking down the staircase on a forward-entrance Leyland Titan with Weymann-built M.C.W. bodywork. This design, with its basically rectangular steps, was produced to Bournemouth's special requirements.

BOURNEMOUTH POSES A NUMBER OF PROBLEMS for the bus operator. Apart from the normal seasonal fluctuation of traffic in a holiday town, there are the difficulties created by the high proportion of elderly people, the lack of industry and the general low-density level of building. In the past, these problems were met by the extensive use of trolley buses, which, with their smooth and silent ride, were ideally suited to the needs of older people; by the use of two staircases to improve passenger flow; and by the introduction of a large number of low-frequency routes to cover the continual growth of new housing areas.

While these developments have undoubtedly served the people very well in past years the current tendency of ever-increasing costs, coupled with the need to serve a population which includes a high proportion of retired people who have to live on fixed incomes of diminishing value, made it necessary to take a long, close look at the problems with this question in mind—"Can Bournemouth afford to continue to provide these facilities?"

In the year ended March 31, 1962, working expenses for trolley buses were 4.08d per mile higher than for motor buses. By March, 1963, the difference had become 5.19d per mile. It is anticipated that the final figures for the year ending March 31, 1964, will show an adverse difference of no less than 8d per mile. On present trolley bus mileage this represents an annual cost of approximately £66,000 to the undertaking, enough to offset two average nationally agreed wage increases. It will be apparent that with the lower average speed of the trolley bus the differential will continue to widen, as each successive wage increase affects the trolley bus costs to a greater extent than the motor bus costs.

Costs are, of course, influenced by the provision of a full-time overhead-line gang, and by the necessity to employ a mains maintenance section. Traction costs are virtually out of the hands of the management and are influenced, *inter alia*, by the cost of coal to the Central Electricity Generating Board and by the maximum-demand tariff which incorporates the inherent feature that the most expensive current coincides with peak traffic-operating requirements. Eight sub-sections are equipped and maintained by the department. Realizing the full impact of the foregoing, and acutely aware that in conditions of ever-increasing traffic congestion the less manoeuvrable trolley bus is always worsening the position, the transport committee and council resolved in April, 1963, that no further purchases of trolley buses should be made; that trolley bus



Part of the front end of the lower saloon on one of the 1963 deliveries of Titans with Weymann-built M.C.W. bodies. It shows the luggage space and the room given for the conductor to stand. The Perspex-covered fluorescent light fitting was manufactured to Bournemouth's specification.

operation should be discontinued as from a future date to be determined when the remaining trolley vehicle fleet has been reduced to such a size as to render its continuance uneconomic; and that double-deck diesel-engined buses should be purchased as replacements. The first conversion took place on September 30, 1963, when a new circular motor bus service was introduced to avoid an expensive alteration to the trolley bus overhead wiring due to the impending effect of a new one-way traffic scheme.

The latest type of Bournemouth trolley bus, delivery of which was taken in July, 1962, is a fine vehicle incorporating many modern ideas with the triple aims of improving the comfort of the passenger, simplifying cleaning and reducing maintenance costs by the use of modern materials. The external

and internal appearance of the 1962-vintage trolley bus compares most favourably with any other type of passenger-carrying vehicle, and the smoothness and silence of the ride has to be experienced to be appreciated. But progress is inevitable and just as the trolley bus ousted the tram, the diesel bus is gradually superseding the trolley bus. The provision of spares for these electrically-propelled vehicles may well be something of a headache towards the end of their useful life.

After extensive tests with different types of vehicle, it was

decided that the rear-engined double-deck motor bus provided the greatest similarity to the desirable features of the trolley bus. Not unlike the trolley bus in frontal appearance, this type of motor bus offers a low-loading platform, it gives a smooth ride due to the use of air suspension and semi-automatic transmission, and has a reduced noise level inside the vehicle compared with the front-engined motor bus. Observations on demonstration vehicles showed that passenger loading and unloading times were only fractionally longer than those found with the old Bournemouth standard layout of a rear entrance and a front exit. In general no difficulty was experienced in meeting existing schedules

Considerable thought was given to staircase design and a layout was evolved incorporating rectangular steps and ample grab rails, as far as possible, so as to give the passenger the maximum feeling of security.

Other problems associated with the front-



New (LEFT) and old (RIGHT) versions of the standard destination screens for double-deckers.

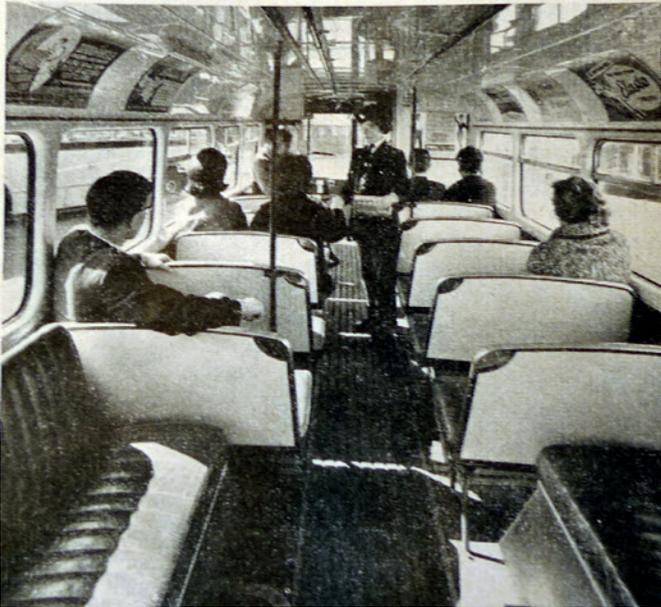
entrance vehicle are the provision of luggage space and a suitable area where the conductor can stand to avoid interfering with passenger flow. Both of these problems have been solved in the current specification with the loss of only one double seat.

It is significant to note that up to the present there has not been a staircase accident on the 30ft-long Leyland M.C.W. motor buses which had this staircase specified, and the unusual view in the accompanying photograph illustrates that passengers' feet can be firmly and squarely planted on each

step. There is no danger to a lady passenger wearing stiletto-heeled shoes; this cannot fairly be said for the spiral staircase layout which tends to catch descending passengers off balance when the vehicle is braked. The design facilitates cleanliness and provides a soundly-built staircase which is free from drumming vibration.

The first ten Leyland Atlanteans with Weymann-built M.C.W. bodies to the new specifications are due for delivery shortly. They will be followed by ten Daimler Fleetlines in 1965 and a further ten Atlanteans in

A lower saloon on a 65-seater Sunbeam-M.C.W. trolley bus delivered in 1962 illustrating how use has been made of easily-cleaned, minimum-maintenance surfaces.



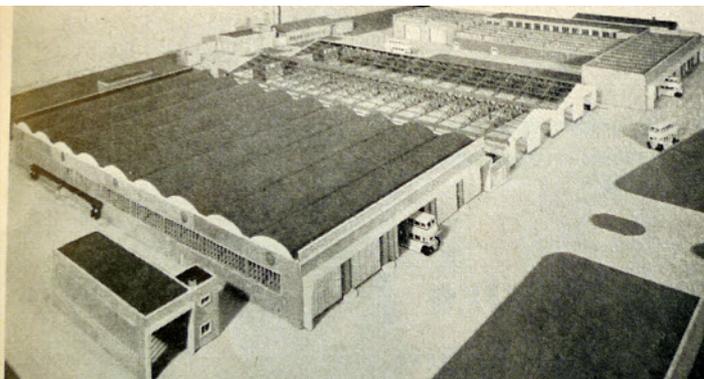
1966. To ensure that the ideas now being adopted were practical, the specification for ten front-engined Leyland's delivered in 1963 was extensively modified to incorporate as many improvements as possible. As Bournemouth's population virtually doubles during the summer season with the influx of holidaymakers, luggage accommodation has been provided beneath the half-landing staircase. The space is adequate, the location is unobtrusive and the positioning of the stainless-steel stanchions is such as to provide ease of cleaning and yet at the same time give security to suitcases and folding perambulators. The provision of a "conductor only" standing area has kept the platform clear of obstruction. Two minor, yet important items are the spring-loaded coat hook at the top right-hand corner of the staircase bulkhead, and the Bournemouth design of smooth and easily cleaned plastics fluorescent-tube cover which accommodates suitable revenue-earning transparent advertisements. The interior double-deck motor bus layout, partly shown here, has proved entirely satisfactory in service,

and concurrently with this work on double-deck vehicles a new specification for single-deck, semi-coach type vehicles was evolved. As the last time Bournemouth purchased single-deck buses was in 1955, it was felt that something more modern was required to operate the attractive circular tours which are popular with summer visitors, and to deal with private-hire bookings in a conference town.

A new circular tour, additional to the present tour, is scheduled to start this summer. It will start at Boscombe pier and traverse an entirely separate route, including some delightful rural scenery in the villages of Throop and Holdenhurst and a unique commercially operated water mill. To meet these demands, it was decided to purchase three 36ft-long Leyland Leopard chassis with Weymann-built M.C.W. bodies to the basic B.E.T. pattern, but incorporating as many as possible of Bournemouth's standard specification items. It was agreed at an early stage that the vehicles would be suitable for operation as one-man buses during the winter months, or after they had ceased to be the principal coaches in the fleet. For this reason the seating capacity was restricted to the present nationally agreed maximum of 45 for municipal one-man buses. Every effort has been made to provide a high standard of passenger comfort with semi-luxury seats trimmed in moquette and hide, saloon and cab heating, fluorescent lighting tinted roof-quarter lights and roof

ventilators, and public-address equipment. Internal appearance has been enhanced by the adoption of a bright, but not gaudy, colour scheme of green and grey, and externally the coach look has been given by a restrained use of Herzim mouldings.

The existing bus fleet has also been improved by a few simple and inexpensive alterations which have brightened the vehicles considerably.



A model of the complete layout at the Castle Lane site. The bus-wash shed is on the left. Then comes first the existing garage and the second garage (to be constructed this year), before the main workshops and the office block. To the rear is the boiler house and the canteen building. RIGHT. A prototype illuminated bus-stop sign for the town centre. The service-details board is mounted on a stainless-steel pole.

Chocolate-brown bands have been changed to maroon a colour less likely to deteriorate by weathering, while a green line between the maroon and primrose sets off the livery quite effectively.

Interior decor on new and existing fleets has been improved by the use of modern materials and the result has been commented upon most gratifyingly by residents and visitors alike. The choice of materials has included Formica, Wareite and Alhambrinal for lining panels and seat backs, Darvic for ceilings, Treadmaster material for floors, Herzim mouldings for trim and Connolly's leather for seats and squabs, and so on. Bell-push systems have been converted to Cronapress strip signalling, and filament-bulb lighting has been superseded by fluorescent tubes.

A modern style of chromium-plated radiator surround with primrose tallow grille, together with an enamelled die-cast shield bearing the Bournemouth borough crest, have rejuvenated approximately 50 vehicles. The radiator surrounds were designed to improve the front-end appearance of 14-year-old Leyland vehicles and were slightly modified for use on larger Leylands supplied early in 1960.

Nine- and ten-year-old single-deck motor buses, which were due for body overhaul and recertification, have had a new look given to their interiors by the use of modern, easily cleaned materials with brighter colour schemes, fluorescent lighting and public-address equipment.

Destination screens were another item come under review. The standard Bournemouth screen showed four lines of equal-size lettering. These left visitors in some doubt as to the ultimate destination, while the auxiliary screen designed to show "via Bath and Westover Roads" or "via Old Christchurch Road" (the two available routes from Bournemouth Square to the Lansdowne) meant that the descriptive text was so long that the lettering became too cramped to be legible and a coloured background was used to distinguish the two. Now a four-screen arrangement provides route number, final destination in capital letters, intermediate points in lower-case lettering, and auxiliary information in lower-case lettering. Not only does this system make the final destination more readily apparent, but it will be more flexible should routes be altered as the change-over from trolley buses to motor buses proceeds.

Just what makes for a slowing down of passenger losses is difficult to assess. But the "new look" which is being given to the system may be partly the reason that while in 1962-63 the traffic recession was at the rate of 2.35 per cent, in 1963-64 it was 0.75 per cent.

Perhaps the greatest single achievement of the past two years has been the preparation and carrying through of plans to centralize all the activities of the department on the fine site available at Castle Lane, Bournemouth. Centralization was visualized as long as 15 years ago, when the original plans for the development of the site were drawn up, but only one garage for 100 vehicles, the workshops and the canteen building were completed. The other garage, formerly the tram depot, is situated at Southcote Road in dilapidated premises unsuitable for modernization, while the offices are in a converted house adjacent to the depot and are totally inadequate for present day requirements. Realizing that centralization at Castle Lane would involve some additional dead mileage, it was felt that the improved control and better working conditions, together with a small reduction in cleaning and maintenance staffs, would amply justify the change. At the same time the sale of the valuable site at Southcote Road would considerably boost the department's reserves and to a large degree offset the cost of providing a central administration.

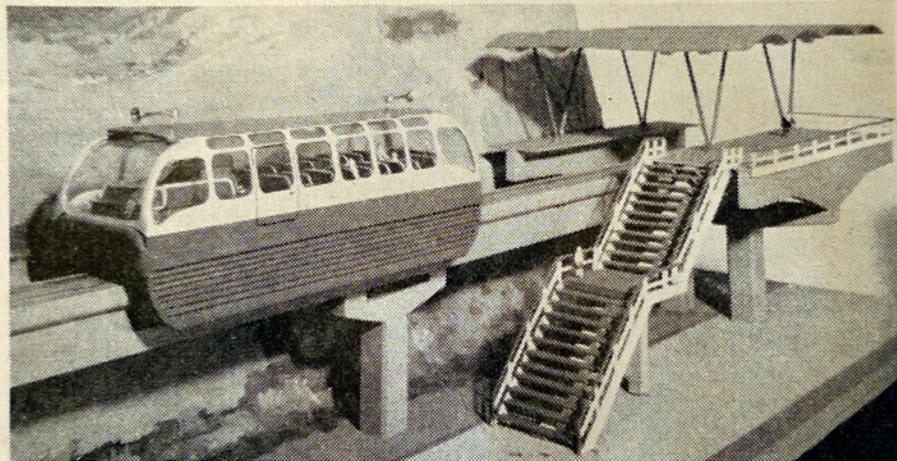
The project was devised in two stages and although the planning and development of the administrative block and the new running shed were dealt with separately for architectural and contract and financing purposes, it was necessary to correlate the one with the other. Construction of the new office block is well under way, completion being scheduled for January next and by dint of foresight in planning the contract for the second stage will provide accommodation and workshop facilities for the remainder of the fleet. Both stages will therefore be completed together.

Each building will be the most modern of its kind and when completed the Castle Lane depot will undoubtedly be second to none and a credit to the transport committee and council for making the project possible.

The total site area, amounting to 24 acres, including the department's own playing fields, has now been fenced.

Much streamlining of office procedure has already taken place with some reduction in staff, and modern methods are being applied wherever possible. An extensive network of private telephone lines with magneto-ringing instruments exists throughout the town, and when the recently installed existing private PAX system in the present offices is transferred to the new office block these lines will be utilized to provide direct-dialling facilities throughout the town.

The Bournemouth transport unit of the future? A working model of a monorail system for possible long-term use on the Undercliff Drive.



Improvements in stationery standards have been effected by the purchase of a Gestolith offset litho machine which gives a professional finish at fractional cost, while a small photo-copier helps to reduce the time spent by typists on copying documents. Experimental work over the past year in conjunction with the International Coin Counting Co. Ltd., utilizing electronic counting of conductors' takings, has resulted in the purchase of two Hydra machines. These, with two V.3 coin baggers, enable a staff of six persons working a five-day week without overtime to handle up to £30,000 a week in the

summer month. Early models counting silver and copper together in one head ran into difficulties in distinguishing between shillings and half-pennies, and between half-crowns and pennies, under certain conditions. The current model, counting silver and copper in separate heads and recording the total in one unit, is virtually foolproof.

Each of the two machines is capable of counting at the rate of 480 coins/min, and although more cash is being counted than ever before due to fares increases, the time taken is much reduced. It has, in fact, been found possible to divert cash-counting staff to other duties for part of some days each week. Five-days-a-week banking has become possible, with a corresponding and worthwhile reduction in risk. More important is the fact that the machines do the "concentrating" and the staff are comparatively fresh even at the end of a busy summer's day count.

Attention has also been given to the security aspect, and drawer-type drop safes are being incorporated at paying-in points, while designs for a new security vehicle are being finalized.

The construction of the second garage mentioned earlier will provide much-needed modern accommodation for the mains and overhead sections for as long as these continue to operate.

A new well-equipped fuel pump shop has been set up where both pumps and injectors can be checked, adjusted and overhauled as necessary. There are already indications that the expenditure has been more than justified. For the first time ever operatives have a dust-free atmosphere in which to work, and the fuel pump shop is kept scrupulously clean. Ample lighting has been provided, and the careful methodical stripping and reassembly procedures serve as a useful training medium for the department's apprentices, who are now legally indentured.

Changes there will doubtless be, for public transport can never stand still, but must be ever ready to adapt itself to the changing needs of the public. Diversions into new estates, linking of routes to avoid excessive layover times, improved turning facilities, better siting of stops and shelters are all part of the daily routine of the transport operator. They have been implemented in Bournemouth with the ready co-operation of the borough engineer, the housing and estates manager and other chief officers. New routes for one-man-operated buses will be introduced this summer to provide additional links between the inland part of the town and the coast, and from Bournemouth Pier to Christchurch Quay. Bus-stop signs are receiving careful consideration to find a suitable minimum maintenance design which will convey all the desired information. This summer the centre of the town will be equipped with new illuminated signs on stainless-steel poles at the principal stops.