

THE  
*Bus*  
COLLECTION  
AT ALFORD



# NEWSLETTER

No. 16 Spring

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## Chairman's Update ...

The latest news on the COVID-19 lockdown at last seems to be positive. The vaccination programme is having its effect and the slow process of defeating the pandemic is now under way. It is difficult to predict how long this will take but, I think we can safely assume that it will be much later this year before we can fully resume "business as usual" in the bus preservation world.

Gatherings of the public look like being at the bottom of the list at the moment so even thinking of an Open Day is not on at present. I have recently received my booklet of annual events in Scotland by the SVVF (Scottish Vintage Vehicle Federation) this has slimmed down from the usual and many events have been marked as cancelled. If there are any events taking place in the area, I know we will do our best to support them.

**Stay well ... Stay Safe!**

**Gordon Mills, Trust Chairman**

## Making the Most of What You've Got ...

The standard design of bus bought by Aberdeen Corporation Transport (ACT) from 1960 to 1965 was the Daimler CVG6 with 'Daimatic' semi-automatic transmission. Including a trial vehicle bought in 1958, there were 58 of these traditional open back platform double deckers which required a conductor as well as a driver. The move to convert the city's bus services to driver only operation started in earnest in 1966 with single deckers but in the same year there was a change in national legislation to permit driver only operation of double deckers, Two years later ACT took a further step in that direction by approving the conversion of ten of the Daimlers to front entrance, thus making them suitable for driver only operation if required.

The conversion programme started in 1968 with bus 323 from the 1964 batch, the work being done in ACT's workshops in King Street. In essence the project involved shifting the staircase position from the back of the bus towards the front, making an entrance with two steps protected by powered doors at the front of the lower saloon. Installation of an emergency door, and removal of the rear bulkhead, building up and enclosing the former open rear platform, and rearranging the seating. In the event, only eight buses were thus treated, the last entering service in 1972.



The conversions were initially used with a conductor on normal service work but were also frequent performers on "Tour of City & Suburbs" duties, and on the various private hire and contract jobs that were operated by ACT. They were also regular performers on a new strand of hire work that emerged in various parts of the country in the early 1970s – the provision of free bus services to new out of town superstores. In Aberdeen such services were provided for quite a few years from various city housing schemes to Fine Fare at Bridge of Dee and ASDA at Dyce. They also appeared on service work as ACT moved to driver only operation of double deckers from 1970. However, they were less than ideal for such duties and their use was limited to peak hours only.

The last of the conversions were withdrawn in 1981, most achieving a service life of 17 years, quite creditable by the standards of the time. This was a year or two longer than the best of the open platform Daimlers and more than some slightly younger vehicles in the fleet. None of the conversions survived into preservation.

**Guest Writer—Bob McGillivray and Associates**

The Bus Collection at Alford is presently not open to visitors, please check our website for further visitor information: <http://thebuscollectionatalford.co.uk/>

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## Looking at the oily bits! - (Brake Systems)

Bus brake systems have evolved over the years and gradually changed with major developments that sometimes take a decade or more to become universally adopted by all of the bus builders. The earliest vehicles such as Albion number 79 relied completely on the amount of effort the driver put into operating the footbrake or handbrake. The idea that this would be adequate for a bus carrying a load of passengers with a total weight of maybe five tons seems remarkable today. In 1930, when the roads were less congested it was maybe acceptable. What the Albion designers did was use the power of levers to multiply the force of the driver's foot.



The Albion's brakes were even in their time unusual in having the footbrake operated on an external drum mounted at the back of the gearbox. The operating rods for this also connected to the front (internal) brake drums. The main brake worked by slowing the rotation of the prop shaft as well as the front wheels. The hand brake operated on the rear wheel internal drums. Setting up the footbrake so that the transmission brake and the front brakes all worked together with equal effect took some patience! Albion goods vehicles not much older than this did not have front wheel brakes at all.

I recall that when the annual test came up for the Albion a few years ago we were told that the front brake drums were oval; this was picked up on the sensitive test equipment at the test station. In fact the ovality was not so great, the leverage in the brake operating system just magnified the amount of variation in the driver's foot pressure on the pedal. There was not much scope for "skimming" the brake drums so new drums were made up by one of the traditional foundries in Sheffield. The only design that matched the drums we had were for a BMC from the 1950s so maybe Albion were ahead of their time

*Gordon Mills*

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## Aberdeen's Leyland Tiger Cubs – Pioneers of One-Man Operation

It is now 55 years since Aberdeen Corporation took delivery of its first batch of Leyland buses ever bought for service in the city.

A look at the splendid 1998 First Aberdeen published title "Fae Dee to Don and back again" ably researched and written by Dr. Mike Mitchell, reveals that until then, the only Leyland bus to ever see use in the city was a Leyland Titan double deck demonstrator which was briefly tried in 1930.

Though the Tiger Cub was a lightly built vehicle, its use for city service work was not unknown. Edinburgh Corporation, as a mainstream user of Leyland buses, took no fewer than 100 Tiger Cubs into stock between 1959 and 1961.

After the war, robust underfloor engined coaches appeared in the market in quantity and were quickly successful. However, they were heavily constructed, and by the early 1950s, their running costs began to cause concern through rising fuel prices and declining passenger revenues.

Bus builders addressed these issues by developing lighter weight under-floor engined chassis which allowed fuller use of the maximum permitted physical dimensions then current. Moving the engine below the floor, permitted increased seating capacity in the saloon, while weight savings of the best part of two tons allowed these smaller engines to potentially return better mpg while still having enough performance to power them, at least by the standards of that time.

Leyland's Tiger Cub was manufactured between 1952 and 1969 and came in various body configurations. Its engine, designed during wartime by the Napier firm in Liverpool as a multi fuel unit for army service, arrived too late for that purpose so around 1946, the design was sold on to Leyland. This firm used it mainly in their Comet series of light lorries and buses and during a 15-year period, it was successively enlarged from 5 to 6.5 litres. More to follow in the next issue!



*( ADTPT Collection Photos)*

*Guest Writer - Lawrence MacDuff*



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