



Chairman's Update ...



We have always tried to keep up with what goes on around us in Alford and we heard that the Alford Heritage Centre were holding an Open Day one Saturday recently. One of our trustees took along some of our publicity information and put a display stand up. This was well received by the organisers and we made contact with several local people and other bodies including the Men's Shed and of course, the GTM. The event was followed up by a meeting of the participating groups with a view to jointly publicise events and co-operate with each other for mutual benefit.

We have had a visit recently from four members of the Tram 15 Group for a weekend working on the body of our Tram. Detail measurement and drawings are being made of the bodywork which will be needed for the reconstruction of the body. I was fascinated to see that more of the original livery lining out has been exposed, this has all been measured and positioned by the drawing team. Most interesting is that all of the lining out is on a green background, of a light colour not dissimilar to the much later bus colour of the 50's and 60's. I am wondering if the dark green colour of the tramcar is a "daub" coat of paint by the Corporation to hide its origins in a similar way to the covering of city Crests and fleet-name when disposing of buses. Some of the exterior hardwood cladding of the tram has now been removed in order to expose the construction detail of the framework in this area. I can tell you very little of what is exposed so far as there are more layers beneath to remove. – *watch this space.*

Gordon Mills, Trust Chairman

Workshop Update ...

We have now made firm arrangements for the upholstery of the two Daimlers, double-deck 160 and single-deck 11. The team involved mainly worked for Alexanders in Falkirk and have much experience of the detail of trimming work there over the years. Completing the trim on number 11's coach seats has been put back until they have done the green leather on 160 as there will be no rush to complete until we have moved on with the major works on 11.

160 will have a leather panel backrest and fluted cushions with "boxed ends". We have a few of the original type used as a pattern. The upholsterers are helping us to source a suitable cloth for covering the rear internal dome of 11. This has to be glued to the single skin, aluminium rear dome and will have to colour match the seat moquette and leathercloth.

Mechanical work on the Dennis Dart, New World First Bus 2004 is nearing completion. A complex assortment of repairs to engine and hydraulic system leaks has been completed. Access to the engine compartment is horrendous compared to the relatively spacious engine areas around the more vintage buses we have. It is hoped that we can move the bus back into the garage until we are ready to start on restoring the bodywork of the bus.

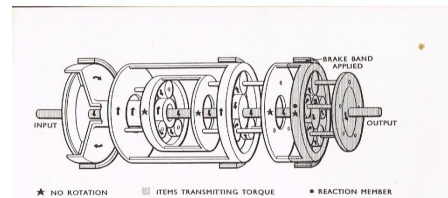
Bus 11 we have been working on the passenger doors which require complete rebuilding with new panels. We have had one work session on the front offside wing, and it will require another day's work at least until it is in place permanently.



The Bus Collection at Alford is open again to visitors, please check our website for further visitor information: <http://thebuscollectionatalford.co.uk/>

WHEELS WITHIN WHEELS – The Epicyclic Gearbox

Mention has previously been made in a “Newsletter” that Aberdeen Corporation Transport (ACT) specified epicyclic gearboxes for its service buses from 1937. The original, “manual”, gearbox demanded a particular skill in the precise timing of engine revs to road speed for the driver to engage a gear without the grating of gear teeth and letting all within a radius know of the error of judgement. The epicyclic gearbox was immune from this loss of control and was developed by Walter Wilson (1874-1957), initially to aid the steering (yes, the steering) of World War I tanks, a project in



Epicyclic Gearbox Train: First Gear

which Wilson played a key role. The diagram shows one set of gears from an epicyclic gearbox which would produce one of the output speeds from the gearbox when the annulus is stopped from rotating by applying the brakeband. Such a geartrain drives two others like geartrains to give the standard three intermediate gear ratios of a typical gearbox. Top gear, fourth, is achieved by a clutch that causes all the geartrains to rotate as one single mass.

Until a design refinement in the later 1950s, the driver of a bus with epicyclic gearbox “pre-selects” the next gear to be engaged, but no change takes place until the gearchange pedal on the floor is operated – hence the term “pre-select gearbox” sometimes used vice epicyclic gearbox. Here, it is the force from the driver’s left boot on the gearchange pedal that operates the brakeband through linkage, the design refinement being the elimination of the gearchange pedal. Thus, was created the “semi-automatic” gearbox that ACT adopted as standard from 1957, initially on AEC Regent Vs, then on Daimlers. The semi-automatic gearbox is still the same basic epicyclic gearbox but selection of a gear through the gear selector switch operates an electro-pneumatic valve that allows compressed air to operate the brakeband, thus engaging the gear.

There is another component quite critical to the use of epicyclic gearboxes still to be described – the fluid flywheel, used as the coupling between the engine and the gearbox - but that will have to wait till another time. In the meantime, should this explanation be unclear, readers are invited to visit us at the Collection Centre for a more advanced tutorial.

STOP FOR A MOMENT - some more words on Aberdeen’s transport related street furniture.

In the days of the horse tramcar there were no fixed stops for passengers to board and alight; car crews would oblige passengers anywhere along the route - except going up hills. Note, however, the expectation that those who were able would get on/off a car without it having to come to a halt. The arrival of the electric tramcar brought some discipline to these matters when a start was made in nominating fixed stopping places and discouraging getting on/off a moving car. These changes could be seen anywhere in the country but what did emerge as a point of local identity was the means of marking stopping places. In the early days of Aberdeen Corporation’s electric tramways, the stop signs had a shield profile, and this design unique to Aberdeen survived, for tram and for bus, until the mid-1970s.

Over the years different forms of stop signs evolved in Aberdeen, all using the same shield profile. Tram stops were red and bore the wording “TRAMWAY STATION”. To assist passengers in identifying stops at night, from 1907 red glass slides carrying the same “TRAMWAY STATION” wording was fitted to (gas) streetlamps. Stop signs for Corporation buses when they appeared were green with the wording “BUS STOP” but stop signs for country buses were blue. Blue signs could be on their own pole or streetlamp or mounted below a sign for Corporation buses. After the closure of the tramways Corporation bus stop signs became red but a few green ones remained. These were at stops for works services which ran outwith the Corporation’s public bus network.




Bus stop signs are a form of road sign and a major change in UK road signage was brought about by the Traffic Signs Regulations and General Directions legislation of 1965. Bus stop signs had previously been provided by transport operators, but these signs too were caught up in national standardisation. Just as local authority identities on road signage were swept away, Aberdeen’s local bus stop signs were replaced in the 1970s by a national standard design of bus stop flag. These are the ones with a pictogram of a single deck bus as per diagram 970 of the regulations.




Yes, we do require volunteers to help us keep our fleet in a good condition, assist with vehicle refurbishment, or a range of other tasks. If you think you could help, either in person or by making a donation, please contact us at: thebuscollectionatalford@outlook.com

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