

EASTERN COUNTIES – Selected memories from May 1965 to December 1969.

I was appointed Deputy Assistant Engineer to ECOC on May 17, 1965 at an annual salary of £1,000 after an interview at Fleet Street, London with the Tilling Senior Training Scheme directors followed by one at Norwich with General Manager Len Balls and Chief Engineer Leo Page. Unfortunately I became ill with an unknown virus immediately upon arrival and spent two weeks in hospital overlooking a cemetery and four weeks at home in Clevedon, Somerset recovering! I had a small office in the chief engineer's office block on the first floor within the central repair works at Cremorne Lane, Norwich immediately behind the head office at 79 Thorpe Road, Norwich. The office looked out over Laurence Scott and Electromotors works and I was serenaded and showered by one of their large extraction plants.

I was worried that I would be expected to work out stresses and design things. I don't think there was a job description! The only task I can recall as recurring was to take the minutes of the weekly works committee meeting chaired by Jack Robson, the Assistant Engineer – a true Yorkshire man, who I had come across by phone when at Bristol Commercial Vehicles Ltd (BCV) as a trainee. When I was having a spell in the service department at BCV, the phone rang one day and this Yorkshire voice said "You know that modified suspension beam that you have just fitted to our RE (coach), well it's b***** broken again!" There were two main problems with the first batch of REs, one that the clutch plate life was very low and that the rear suspension hinged fabricated beams, which each supported two air bags, cracked in half spectacularly. The first was only cured by introducing fluid clutch and epi-cyclic gearboxes in time and the second was a campaign change to fit the FLF style flexible beam rear suspension to all REs. I was in BCV experimental department when the test rig confirmed the failure mode and in the drawing office to produce the campaign change drawing and instructions! Jack also introduced me to the phrase 'as noisy as a weaving shed' which meant nothing to me as a quiet west country man!

I had a few trips out with Jack, who tended to see the central repair works as his main domain. When I was training at Bristol Omnibus Company, I was shown the Setright ticket machine shop and made aware in hushed tones of a 'problem' that had been discovered whereby the machine could be made to print a ticket at the correct value and then the dials could be forced back to a lower fare and the register counters would only count the lower fare. Thus a conductor could provide the correct ticket to the customer and pay-in a lot less than was rightly due. One morning, travelling across Norwich to work on a full 1948 vintage K5G, (*this body type had been replaced on my Bristol school journey eight years earlier!*), I was at the back upstairs, showed my leather bound red pass and then watched the conductor 'turn-back' his Setright on every fare! I'm not sure whether Jack knew about this scam, but he soon had the senior Setright mechanic to discuss the matter! Another of his phrases comes to mind: 'there's none so miserable as those that are short or crippled'. We sallied forth to the Setright works in London and came back with a modification that should cure the old single digit fare machines still in use in Norwich city. We also took a two digit, modern machine, which I could turn back successfully and they promised to overhaul it and make it fraud proof. I was taken along to collect it, as the expert! I thought the machine felt 'dodgy' and succeeded in turning it back in front of the Setright managers! More Yorkshire expressions were forthcoming! Eventually they came up with a shear pin that broke if you tried too hard and then the conductor had to explain why his dial went round and round. I doubt if he got away at the first enquiry, but he certainly wouldn't the second time. I don't think the road staff could have known that it was me who upset their well paying scam – they never showed it! Far less difficult was the conversion of the Setright machines from £.s.d to £.p, which I planned.

I set up an experimental items system for trying things out in service and providing regular reports for the company and manufacturers (especially BCV and ECW) and this was always admired when I attended the Tilling Group regional engineering meetings three times a year, hence getting to know the chief engineers of the then Eastern Region. I had a rubber stamp made with the then-current oval Eastern Counties logo and the address so that all drawings and documents looked really professional.

The vehicle maintenance system comprised of 'docks' at fixed mileage which were scheduled from the Chief Engineers' office weekly and were carried out at central repair works for the Norwich (Surrey Street), Cromer, Great Yarmouth, Lowestoft; Ipswich for Ipswich, Bury St Edmunds, Felixstowe and Saxmundham; Peterborough for Peterborough, March and Kings Lynn and Cambridge (Newmarket Road) for Cambridge (Hills Road), Ely and Newmarket. Specific mechanical units (engines, gearbox, rear axle / differential, air brake units, air suspension control valves, compressors) were scheduled for preventative change and were sent out by truck from central repair works in time for fitment.

When I arrived, the schedules showed vehicles due for attention every 30,000 miles and with the sixth dock being a change of all units, then the cycle started again. The previous chief engineer John Woods had set up this system and it had worked like clockwork. A few years before my arrival he had sent news to all depots that through the completion of the programme to replace all 6 cylinder engines in double decks with 5 cylinder engines, the company's overall average fuel consumption had been reduced such that it was now better than Lincolnshire Road Car Co! Happy days! The regular site of a 5 cylinder double deck chugging along the main roads followed by a stream of cars was already familiar! I collected LFS125 from ECW at Lowestoft – the first time I had driven an FS with 5 cylinder engine and 5.5:1 back axle ratio, making it a very sluggish machine compared to the 6LWs with 6:1 back axle ratios that I was used to at Bristol Omnibus. I was assured when at BCV that an enquiry had been received from Norwich whether 5-cylinder engines could be fitted to the 30ft double deckers – presumably when the six rare FL vehicles were ordered and delivered with Bristol BVW engines (After my time these were changed to Gardner 6LW for better reliability and standardisation, I believe).

However this was a time when PSV fitters were being attracted away by the HGV industry which was having to get to grips with annual HGV testing at the newly set-up testing stations. Central repair works was beginning to slip behind in producing overhauled units and it was unthinkable in those days, and probably impossible, to find a contractor to help even if the engineer's budget ran to it. So units began to fail in service and the running depots were having to spend more time carrying out major unscheduled changes that should have been done in the dock shops. The immediate solution was to write 40,000 miles for 30,000 miles and alter frequency of one or two unit changes! Things got more dire. In Peterborough ECOC pay scales were such that skilled fitters were attracted away to semi-skilled jobs in new industries, so Kings Lynn garage was given some major docks to do. Traffic conditions were getting tougher as well, new vehicles had compressed-air assisted breaks and were being specified with 6LW then 6LX engines to replace 5LW vehicles with resultant increases in wear and tear from greater braking and acceleration. The routine inspection and adjustment (in those days brake adjusters, clutch adjustment, battery topping-up were frequent manual tasks) slipped behind and the mechanical staff were depending on drivers to report defects. I'll come back to this later.

I always had a bit of a penchant for design. I was able to put this to use in two items that were seen by many people and in the second case used by ECW on other customer's vehicles. The first was the PAY AS YOU ENTER Please tender exact fare if possible transfer that was applied to the exterior

of all ECOC one-man vehicles for several years. I think the 'if possible' was my own customer relations addition, as even then I didn't like 'thou shalt not..' notices on buses. The second was another small transfer which was required when time limits were placed by law on the use of horns during the night. All ECOC one-man vehicles were retrospectively fitted with reversing horns and reversing signs after one or two fatalities, one in Lowestoft bus station before my time, and one within Surrey Street garage. Now a switch had to be incorporated to turn the safety device off! Realising that few types of vehicles had similar dash panels and thus space, the transfer was designed to be used on all vehicles. I achieved this by incorporating an arrow that was in a square and could thus be cut off and placed at either end of the notice section and turned up, down or straight when applied. Another abortive bit of design was to produce bus stop plate designs for the Ipswich area incorporating both companies names and or colours. The standard British bus stop plate appeared not long after this effort, but it never achieved the main purpose, by which it was 'sold' to the industry, of being recognised as a statutory sign prohibiting parking of non-PSVs.

I was allotted the task of installing the first drive-through washes in the company. I spent a night or two and a day or two watching the run-in at Surrey Street so as to position the first drive through bus washing machine in Surrey Street, Norwich. It had to fit between the roof trusses and had a recirculation tank. It replaced a couple of Essex washers which dropped down around a vehicle and mechanically brushed the sides and rear leaving the front to be done by hand – one of these had to be extended to cope with the first 36 ft long vehicles. It had to cope with an allocation of about 240 vehicles (of which some 45 were in outstations overnight and an overflow on open ground across the road at the top of the bus station). Although I got the position about spot-on, (after all I had been driving for a fair bit of overtime on service driving at Bristol, as a graduate trainee), there were some operating problems. The wash was fitted with a felt blanket to deal with roof cleaning and it also swept a good volume of water off the roof of vehicles, but drivers were very keen to get washed and parked up. This meant that there were rather more gallons of water on the garage floor than was acceptable and some of this made its way towards the maintenance pits which in those days were at the city end and not enclosed. I discovered that a 'dripping time' of 20-30 secs within the exit ramp was all that was needed to improve matters drastically and this was implemented! This type of wash did not deal with fronts and backs. So the Depot Mechanical Superintendent (DMS) Alec Mortimer recruited four older 'dependable' part-time cleaners who succeeded in hand cleaning all the backs for the evening run-in as each bus stood before driving-through. The fronts never get so dirty and water coped between routine cleans! Then a night or two were spent in Hills Road, Cambridge to site their wash.

One problem I like to think that I resolved with the FLFs was that conductors couldn't see forward to announce where they were. I designed a cut out in the nearside blind and a blanking plate in the cab which stopped reflection from the bright fluorescent lighting distracting the driver. I wonder what the Scottish group made of these when they were exchanged with VRT, thankfully after I had left for Maidstone!

With the arrival of a new General Manager, W Tom Skinner, formerly chief engineer at Eastern National – the richer sister company down the road, policies changed! He wanted to keep himself ahead in engineering. Leo Page, the chief engineer at the time preferred being left alone to do what he was used to! The first change was from 6LW to 6LX in the second large batch of FLF double decks and the replacement by BCV of the Gardner 6HLX engine by a Leyland 680 engine in one of the second batch of RELH coaches (I think it was RE890) as an experiment to improve the performance of the coaches which were perceived to be slow! [As an aside, this strategy didn't work! Later I discovered that Crosville specified Leyland 680 engines in their RELH coaches for Liverpool

London service due to complaints of slow running but found that the slower Gardner engine vehicles still got in first because their greater low speed torque got them up the hills faster than the Leyland versions. Later, when at Ribble, I complained to Leyland service engineers that 12m Leyland Leopards were being outperformed by the splendid heavier and bigger Bristol VRL double deck motorway coaches which also had Leyland 680 engines. I was informed that the VRLs had the 'Power-Plus' truck engine which was not available in the horizontal format and in any case wouldn't fit into the Leopard chassis frame if they tried! This was an indication of British Leyland at its worst and a pointer to its future demise!]

The next 'impressive' idea was to install Dawson cyclone cleaners to make interior cleaning more efficient. I saw the system in use at Trent, Derby where a long straight service lane allowed the vehicles to line up with raised side platforms in place for the operator to enter the vehicle from the rear side emergency door to agitate litter with a compressed air lance to be sucked through the front door which was covered by the giant fan extractor unit. I was given the task of installing a unit in Surrey Street but had little conviction that it would be operable! There was no way any vehicle could line up in a straight line at Surrey Street – it had three or four side by side fuelling points and there was just room to drive from these through the bus wash at the back side of the garage. All I can say is that it was installed, mobile steps were provided and it got used during the day as outstation vehicles came into fuel. I can't remember whether Hills Road, Cambridge received a unit.

New FLFs around this time were delivered with flaps that would open under the rear upper deck seats to let in an air current to take all the upper deck litter out through the front door. Earlier deliveries were converted later. Director George McKay on entering Cremorne Lane works and seeing the pile of flaps waiting to be fitted exclaimed "what's all this f***ing stuff for?"!

Another fascinating episode involved the last MW (LM) buses. Two (or was it one?) were specified to have front entrance and centre exit with room for more than usual standing passengers and glazed quarter lights. Perhaps a good idea in principle for the Thorpe Station – Cringleford route. But then you looked at the exit and the huge deep steps and shuddered! One was allocated to King's Cliffe outstation to provide greater capacity (fewer seated, more standing) on the commuter inbound service to Peterborough! How long did that last? Why on earth didn't they (was it Tom Skinner or Tilling group?) wait to use the lower-floored RESL (RS) vehicles which followed immediately in place of the outstanding order of MWs? The devil is in the detail.

Due to the poor earning potential of ECOC, it had always run vehicles to a great age and received second hand vehicles from other 'richer' Tilling group fleets to save capital costs. Tom Skinner was well aware that Eastern National was disposing of sound Bristol LS buses which would help the ECOC vehicle age profile and several arrived, the first stage carriage versions ever in the fleet and confusingly designate 'LM'! Another innovation was the purchase of some Bedfords. There were 4 Bedford VAM with Leyland engines with Duple coach bodies, designated CB. I collected one of these from Hendon. They had very heavy steering! Also 4 Bedford VAM, 2 with Leyland engines, 2 with Bedford engines (to see what the cheap engine would do compared to the 'heavy duty' ones) with bus bodies by ECW, designated SB 661-4, I think. The driver had to get to his cab by walking behind his seat and squeezing forward, because the ticket machine and cash tray structure were mounted over the shallow engine cover. I had these rebuilt with a substantial engine cover to form the normal way into the cab. *(These Bedfords are not mentioned in your website fleet list! Although I say here 4 + 4, I have just looked back through some lists of slides and notice that fleet number CB836 and 845 occur, so perhaps there were more or two batches? I also was reminded that ECOC*

had an earlier unique batch of Bedford SB chassis with Duple coach bodywork which had Gardner 4LK engines – this must have been another of John Wood's conversion projects!)

When Jack Robson retired as Assistant Engineer in June 1967, he was replaced by Eastern Area Engineer, Charles Mannell. Tom Skinner told me I was to replace him as Area Engineer. I told him that I felt totally unsuited to the job as I had had no practical training other than as a graduate engineer and holiday jobs, but could do the Assistant Engineer's job! He said the area could run itself and that's why he was putting me as Area Engineer for the experience – they will teach you the job!

The greatest advantage was a company car – no less than the retired Assistant Engineer's car because Charles had long legs and had had his identical Austin Cambridge seat amended. Finding and looking after the outstations in Norwich and Ipswich districts was a joy – no car or mobile phones! I carried an oil can for door hinges and locks, lamp bulbs and a cloth and cleaner to keep the signs looking tidy. In 2½ years there was one outstation that I never found! Whenever in Diss, I changed the time clock to suit the time of year for the bus station lighting. It was the norm for the Ipswich and Central Works vehicle painters to spend the Summer repainting company property, including outstation garages and booking offices. I enjoyed deciding the colours to be used and remember having the ceiling in Bury St Edmunds booking office painted bright red and in Ipswich where the public wandered through an old office building between bus stations, I had the ceiling painted black so they could not see how irregular and tatty it was!

New vehicles were usually allocated to outstations so there would be no starting problems in the mornings. An MW (LM) allocated to Stradbroke (Ipswich district) did a run on one day a week into Norwich. The driver parked his bus at the back of Surrey Street garage and moved another one to block it in, so that nobody used his vehicle during his lay-over. I have a feeling that it had a plastic flower pot on the front dash!

In the Summer, Great Yarmouth was allocated extra coaches and the DMS was distracted by his wife's lodgings business. I got to know from the experience of drawing my finger on the interior windows of a bus how long it had been since it had been cleaned – in Great Yarmouth it was often nicotine encrusted from over 8 weeks! Incredibly, come to think back, I cannot remember ever having to deal with any disciplinary action or formally meeting with any trade union representatives during my time as area engineer, except indirectly when we had a campaign check and rectification of heaters on all SC (LSC?) buses in Ipswich depot one cold winter. We had an apprentice at Great Yarmouth and at Lowestoft. I was concerned that the one at Great Yarmouth was not getting adequate training so arranged for him to spend time at Surrey Street where he could get a lot more experience – I suspect he had to travel back and forth by bus, so probably didn't do much work!

Getting buses out of ditches was another regular item where I was shown how to do the job. My predecessor had designed, and had made in the works, ground anchors which could be secured to the soil with large angle iron stakes, to provide a winching point. I arrived one snowy morning at Bulmer Tye to find the Ipswich gang already well forward with recovery of a double decker. I was then approached by a GPO Telephone engineer's van. He said he was looking for a cut in all the telephone cables along the road – then he saw the ground anchor! I was never advised what the cost was to our insurance. We did issue instructions to check for little concrete GPO posts before inserting stakes in future.

As mentioned before, the regularity of vehicle routine maintenance was slipping badly. This was a national problem and the Traffic Commissioners were beginning to get tougher by insisting on very high standards at the Certificate of Fitness inspections, such that depots could no longer just take a vehicle off the road, steam clean it and present it. [In those days a new PSV was given a Certificate of Fitness (COF) at the factory for seven years. It became the practice that at the first re-certification the longest period that was granted was 6 years if the vehicle was in good condition, 5 if not!, and at the second re-certification 5 years and so on. At ECOC the average age of vehicles was always high, so COFs became more frequent]. If the certificate ran out, the vehicle was off the road, full-stop! So, we tried putting all Norwich district COFs through central repair works where they took precedence over mileage docks. The regular inspection of PSVs by the Ministry of Transport was always carried out in the depot and each inspector was supposed to see each vehicle every year. It was not so regimented as it is now or was for HGVs at that time.

This was the time when no pay increases were permitted by government unless there was an increase in productivity. A work study scheme was begun for engine overhauling at Cremorne Lane works. Charles Mannell had experience of engine overhauling on a grand scale in South Africa and set about the job in a proper manner. This soon improved output and we began to find that engines were available when wanted. Later, these engines were declared to be poor quality at Surrey Street as they failed within a short period. Having already learned at this early age that most people tell you what they honestly believe to be the truth, there is usually an explanation if you dig in carefully. One day whilst 'walking the job' I asked a cleaner why he was topping up the engine oil of an MW (sorry, LM) when it came in from an outstation, as it was fitted from new with a Frankman Lubrimatic automatic top-up system which enabled the sump to be replenished from a reservoir. He said it didn't work, so I had a look and discovered that it had been disconnected and the wide stub pipe onto which the normal filler tube should fit was left open without a cap. Alec Mortimer was horrified and a quick check over the next few days as similar vehicles appeared for refuelling from outstations revealed several in this condition, thus sucking road dirt straight into the oil sump and causing rapid bore wear! Filler tubes and caps were ordered up and the Frankman's officially and properly disconnected.

Surprisingly the arrival of the first RELL (RL) and VRT (VR) doesn't seem to have made a dent on my memory. It must have been without incident, after all they had automatic break adjusters and a fluid clutch! I can recall that a VR was converted to one-man operation fairly swiftly, our first double deck so equipped and allocated to Attleborough outstation to prevent overloading on the first morning journey- rather more successful than the King's Cliffe experiment! This presaged the huge FLF for VRT exchange between the Scottish Bus Group and National Bus Company that followed soon after which greatly effected ECOC but not me.

By this time the 240 vehicles at Surrey Street were being inspected about every 8 weeks, if that, and the maintenance was running mainly on drivers' defect reports. The performance of the three running shift chargehands kept the fleet on the road! As a small improvement, I had already increased the number of specific Norwich vehicles that were allocated to Cromer depot for routine maintenance. I then received a simple instruction from the General Manager (I think the Chief Engineer was off sick by now and was replaced by John Phelps just as I was leaving in late 1969) 'I want all Surrey Street vehicles routinely inspected every four weeks – organise it!' I think I might have said that this would mean buses not being available for service when broken springs, brake relines etc were found initially at a rapid rate, but no doubt got short shrift.

I sat down and worked out how many vehicles of each variety would be required every week day so that traffic would have an even flow of vehicles. I could see that there would be some efficiency gains when we got it going because we currently (I had inherited and who was I to query it?) had wandering battery toppers-up, a Dunlop tyre man unable to find vehicles he needed, interior vehicle cleaners scrubbing clean the older vehicles frequently and the newest and outstation vehicles rarely, the advert fixer never being able to find the right vehicles. I went to see Alec Mortimer the DMS and asked him what he would say if I told him that we have to inspect every vehicle every four weeks. He replied that he would take his white-coat off and go straight home! Never one to have a 'meeting', I sat on the radiator in his tiny office, we chatted around what would need to be done, and sure enough, it was my assurance that specific vehicles will be released by traffic on the allocated day, that caused him to say 'give me another shunter and I'll make it happen!' And he did. Then immediately I was successful in getting the job of Assistant Engineer at Maidstone & District, an ex-BET company that was now, with the Tilling Group incorporated into the National Bus Company. My 2 ½ years there, with Vin Owen as my Chief Engineer, was a different world and another story!

I was followed as Deputy Assistant Engineer by Chris Jepson, who also came via Bristol Commercial Vehicles. When I left, the post of Area Engineer Eastern disappeared and Chris became Norwich District Engineer which newly incorporated Kings Lynn.

Geoff Pullin
BEng, CEng, MIMechE, MCILT