

SESSION: VICTORIAN ELECTRIC TRAIN PRESERVATION

DON POTTS - ELECRAIL (a division of Steamrail Victoria)

MELBOURNE ELECTRIC TRAIN SYSTEM

The original suburban Electric Multiple Unit train fleet, including passenger cars and parcel coaches totalled 911 wooden bodied vehicles. The 1500v DC system was progressively extended to 340Km.

Tait Trains: The first new Tait, open, centre aisle, sliding door cars entered service as steam locomotive hauled trains in 1910. World War 1 delayed EMU operations until 28 May 1919. By 1952 the fleet included 617 passenger cars and 6 parcel coaches. The last Tait in service were withdrawn in November 1984. Two double-ended motors, 1470M and 1471M operated the Overhead Inspection and Lubrication Train until 1988. The General Electric equipment was also used for swing door and suburban goods locomotives.

Swing Door Trains: To supplement the new Tait stock, 288 compartment cars with outward opening swing doors, mostly built between 1887 and 1907 for steam hauled services were proposed for conversion to electric traction. The motor cars received new stronger and longer steel underframes to accommodate an extra passenger compartment plus a driver/guard compartment. The trailer cars original steel underframes were extended for 2 extra passenger compartments. Some motor cars which did not have their "electrics" fitted continued in locomotive hauled service until the 1960s. The "Doggies" (2.6m) as they were affectionately known were narrower than their Tait (2.9m) cousins. In

1958 when most of the fleet was still intact, it was announced that all the old swing door trains would be replaced by new Harris trains within 5 years. The age old story of inadequate funding was to restrict and slow the production of these new replacements, thus some of the old veterans under went major overhauls to survive another 16 years - ironically a situation similar to that which gave them an "extended life" over 60 years previously ! Several were converted to parcel coaches.

The last Swing Door Train passenger service operated on Australia Day, 1974. Motors 113M and 156M continued as Joliment Yard shunters until June 1989.

Harris Trains: The first of 436 Harris "Blue Trains", centre aisle steel cars entered service on 15 March 1956. In 1982, after only 66 of the 252 cars proposed for modernisation had been completed, the project was abandoned. The presence of asbestos made it more economical to increase the order for the new Comeng trains. Conventional scrapping would also be hazardous and costly - around 300 were sealed in plastic envelopes for a one way journey to be dumped into disused sand pit quarries. The last "Grey Ghost" Harris Train was farewelled on 6 April 1991. Two motors, 794M and 797M superseded the Taits in hauling the Overhead Inspection and Lubrication train in 1988. These were still in service in April 1998, but only greasing the rails. Other Harris "ghosts" continue in service today after conversion into locomotive hauled air-conditioned country cars.

Hitachi Trains: The first stainless steel cars ("Silver" trains as distinct from the "Blues" and "Reds") were introduced in 1972, and totalled 355 vehicles. Some are now in storage as surplus.

Comeng Trains: The first air-conditioned cars entered service in 1982. The original order for 300 cars was extended to 570 following the decision to abandon the Harris fleet upgrade in favour of new trains. This decision hastened the withdrawal of the Taits which would otherwise have been expected to soldier on until the mid-1990s.

Double Deck Train: A 3-car prototype based on the Sydney Tangarra trains but modified to suit Melbourne's narrower loading gauge operates on the Box Hill group of lines. Platform clearances have been altered to accommodate this train. No further cars were ordered because of the decision to refurbish instead of replace the Hitachi trains. Thus the fleet of single deck stock is able to handle all traffic.

Locomotives:

1100-1101	(1923) steeple-cab suburban goods. (Both scrapped pre-preservation era)
1102-1111	(1928) box-cab suburban goods (E-class) (6 scrapped)
1150-1174	(1953) Mainline passenger and goods, twin cabs. (L-class) (21 scrapped)

PRESERVATION - HOW IT ALL BEGAN

'Twas back in 1967, when most Australian rail enthusiasts traditionally professed that "Steam is the only way to go" that three young admirers of "Sparks" scuttled that image by actually persuading the Australian Railway Historical Society - Victorian Division - to ask the Victorian Railway Commissioners to retain two swing door twin trailers, 12BT and 13BT. Both of these were noted for their ornate exterior architecture. Somewhat surprisingly, perhaps, the Commissioners agreed and thus electric train preservation was born.

RESTORATION - A DAUNTING TASK

Swing door trains: Subsequent to acquisition, 13BT was found to have serious body structure faults and was exchanged for driver trailer 24D. When swing door services ended

on 26 January 1974 the Association of Railway Enthusiasts joined with the ARHS-V to assist in obtaining motors 107M and 137M both of which had operated on the last train. In December 1980 with the demise of the Tait trains gathering momentum, all electric train preservation was vested in the newly formed ElecRail Division of Steamrail Victoria. Restoration of swing door stock which had been withdrawn in reasonably good condition should have been a dream for preservationists. Not so! Six and half years were to drag by before secure and roofed accommodation was obtained. During that period the cars had been abandoned in a hostile, open environment. Ornate brass lights, teak panelling and driving equipment was stolen. 263 windows were smashed. Seats were slashed. Power bogies were removed for use under the new Y class diesel electric locomotives. There was general deterioration caused by the weather.

Only by sheer luck were 107M and 137M spotted being spirited away from Newport to Bendigo for scrapping. Although 12BT was the jewel in the crown, it was prudently decided to restore the M cars first so as to utilise the then available expert electrical volunteer labour which may not have survived in later years. Full scale restoration work was authorised by the Railways in 1978.

The first major project began on 1 February 1981 in 107M. Originally built as steam locomotive hauled country car, 85AA in 1888, it was converted to electric traction in 1920. Disaster struck six months later when a rake of heavily laden wagons being shunted ran away out of control, knocking 107M through a brick wall. As a result the drivers cab and roof was demolished, and the rear power bogie ripped from the underframe.

Whilst lesser mortals might well have given up, the ElecRail volunteers showed great determination in deciding to "pick up the pieces" and start again. The extra work included reclamation of replacement body parts from similar disused locomotive hauled (Way & Works) vehicles stored at Allendale, beyond Ballarat. Six years later the then 99 year old 107M resplendent in the 1916 livery of dark brown and gold lining, was recommissioned on 5 December 1997. Restoration then began on the 1907 137M which is now due for completion this year. The 3 car swing door set will become a reality when 12BT is restored next century.

Tait Trains: To enable 107M to operate pending completion of further swing door stock, Tait's 327M, 341T and 470M (double ended) were restored. Parcel coach 2CM was made serviceable last year and awaits a test run.

Despite many heart breaks, the preservationists welcomed a State Ministry of Transport grant of \$350,000 for the restoration of a 4-car Commemorative Tait Train as part of Victoria's 150th Anniversary Year in 1984. This was a successful partnership between the State Transport Authority and ElecRail whose input included nominating the cars (381M, 208T, 230D and 317M), painting them in the 1936-1958 Rose Red/Moonstone Grey livery, together with five months spent salvaging parts, and the provision of their secure transport to the Ballarat Workshops where the work was done. Following a Grand Red Rattler Auction in February 1985 ElecRail received \$23,800 as a half share with the ARHS-V Railway Museum from the sale of 84 withdrawn Tait cars.

The train was placed in ElecRail's custody, but suffered whilst in open storage until transferred to the Seymour Rail Heritage Group in 1992. Because of the remoteness of Seymour and the high transporting costs involved, the train has been rarely used since then.

Harris Train: The prohibitive costs involved in removing asbestos prevented retention of these cars. Although 794M and 797M, both gutted internally, may become available from the Rail Lubrication Train, restoration will be dependent upon Harris train enthusiasts volunteering to undertake the necessary work.

Locomotives:

E-Class: All require long term rebuilds, rewiring and replacement of the power bogies. Extensive steel body repairs are underway on 1109. Either 1106 or 1108 is the choice for the second locomotive.

L-Class: Some of these locomotives were in excellent condition when withdrawn in 1987, having undergone recent major overhauls. Those selected for retention were no exception. Again, preservationists were hampered for nearly another decade by open storage, damage when tracks subsided beneath the stored locomotives, followed by restricted access in later years. 1162 was restored to service on 31 March 1998. 1160 is to be the second operable locomotive with 1169 being used as a source of spare parts.

IN RETROSPECT

Mindful of the need to ensure an adequate source of spare parts for future operations, ElecRail acted promptly to obtain supplies which would otherwise have been scrapped. These range from globes, body parts, pantographs, bogies of 6 locomotives through to 19 vehicles. Deterioration of spare parts in open storage attract arm-chair critic complaints about "stock piles of junk". Some ElecRail vehicles have been stored outside for up to 31 years. Even their protective tarpaulins have disintegrated. There hasn't been adequate secured or roofed accommodation for all restoration work or storage of restored vehicles, let alone "old spare parts junk." The unforeseen disastrous accident to partly restored 107M was a prime example of the wisdom in accumulating spare parts such as drive trailer 32D, which still provides a valuable source of bits and pieces to help restore other swing door cars.

The question of why only four cars and a locomotive have been restored, (not forgetting considerable input for the four car Commemorative Tait Train) might on the surface appear to be insignificant after three decades. This, however, deserves an in depth analysis, particularly acknowledging the high standards achieved. A Heritage Study in 1988 recommended that the old Newport Workshops, one of the few surviving 19th century structures complete with equipment should be retained for future association with railways. This facility was ranked equal second with Sydney's Everleigh after Crewe in the United Kingdom. Encouragingly the State Government announced in September 1993 that the West Block would be made available to preservationists. Regrettably by the time possession was available in 1994, the Public Transport Commission had gutted the buildings except for the overhead cranes.

Apart from the factors already mentioned, the progress of restoration has also been curtailed on 173M and the Tait stock maintenance for three years because preservationists have been forced to abandon their preferred skills in order to provide facilities and build access tracks into the West Block.

A comparison between train and tram restoration is worthy of consideration. Generally two clerestory roofed swing door carriage compartments plus a driver/guard cab equals one single truck tram. A seven compartment M carriage equals three bogie trams.

As already stated, Victorian electric train preservation could have been a dream. That dream would have become a reality had more members of the railway administration been supportive instead of obstructive towards the volunteers, some of whose dedication has been unnecessarily frustrated over a whole working life. The efforts of the volunteers have saved and preserved railway heritage - something caring governments and bureaucrats have an obligation to encourage. Appreciation is gratefully acknowledged to those

individual railway staff without whose valuable help our task would have been even more difficult.

THE WAY AHEAD - CONTINUING CHALLENGES

Initially most retained locomotives and rolling stock were made available by the railways department on loan to preservation groups. Open market prices have superseded scrap value sales. Annual inspections and tests are required for use on main lines. Operations at reasonable cost are approved on the lodgment of written applications. The imminent privatisation of Victoria's railways requires the clarification of Heritage rolling stock and sets new challenges to continue fund earning operations.

The public, with less and less affinity to railways need something extra to entice them towards patronising heritage train travel. The downturn in tourism also presents difficulties as does the loss of destinations through the replacement of electric services with diesel traction.

ElecRail also experiences the same world-wide problems in attracting younger generation volunteers, many of whom in this road transport era have never travelled on a train. Thus survival increasingly depends more and more on a dedicated but ageing few.

As a pioneer in railway preservation I feel it is timely that this Conference has adopted the theme **The Way Ahead**. Indeed our successors will rely heavily on organisations such as a strong Council of Tramway Museums of Australasia and National Federation of Rail Societies, New Zealand, to succeed in the future.

DISCUSSION:

Bob Pearce (Perth Electric Tramway Society) Re: Operating heritage trains on government tracks. A similar situation exists in Western Australia as in Victoria about rail "companies" or railway museums having track access and running priority. In Western Australia a WAGR driver used to have to make three return trips on a line to be accredited to drive on it. Today fees are charged for any non-government operator, but Western Australia has set a pattern of agreements with these parties which other museums should pursue in their own interests, with their own local railway authorities. In essence when museum vehicles operate on the infrastructure of statutory authorities, a licence fee will need to be paid, plus the employment of - and payment to if need be - the staff you use for your unique operation.