

TROLLEY WIRE

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NOVEMBER 2018

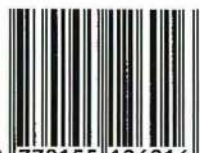


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TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM
MAGAZINE

NOVEMBER 2018

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EditorBob Merchant

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Front Cover:

Variotram 2107 at Haymarket bound for Central Station at a quiet period on 24 July 2014.

Richard Jones



See page 21. Late news and photo above: the former Rozelle Tram Depot War Memorial was relocated to the Tramsheds site during October, and is now located in the north-eastern corner on the southern side of the Tramsheds, not far from its original location. Now known as the Tramsheds Soldiers Memorial, it is to be re-dedicated on 8 November 2108.

Robert Merchant

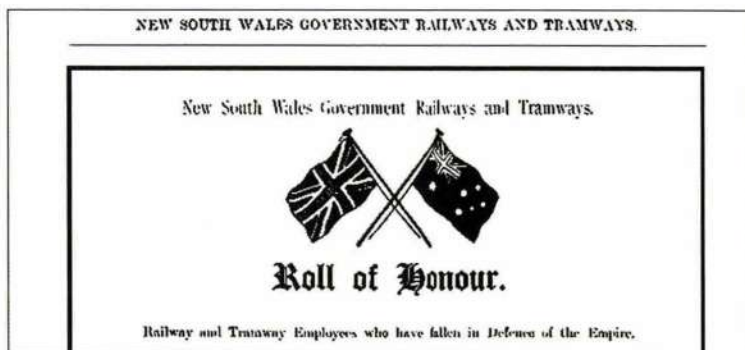
Transport Heritage NSW announced during an award ceremony at the Museum of Sydney on Saturday 27 October, that one of the 2018 Transport Heritage Grant recipients was the Sydney Tramway Museum with a grant of \$17,094 for the restoration of the heritage Railway Square waiting shed under Category 1: Restoration, Reconstruction or Preservation of a Heritage Transport Item.

The NSW Tramway Men who lost their lives during the Great War 1914–1918

The New South Wales Government Railway and Tramways Annual Reports of the Commissioners for the years 1915 to 1921 included a Roll of Honour of the Railway and Tramway Employees who had fallen in Defence of the Empire. The list below is the Tramways portion of the final list which appeared in the report for 1921, pages 34 to 38 inclusive. It has been sorted into an alphabetical listing. The employee's tramway

occupation and military serial number has been added. The military unit is as shown in the Annual Report and in some instances is not correct. The unit to which a soldier was attached at time of death is shown in their individual military histories which are not published here. Their ages ranged from 18 to 40, with the average age being 28 years. Thirty of their number were only 18 and 19 years old.

The heading in the 1921 Railway and Tramway Commissioner's Annual Report.
ARHS Railway Resource Centre



Name	Tramway Occupation	Serial No	Military Unit
Alderton, Edwin Thomas	Tram Driver	6457	1st Battalion
Amour, Percy William	Cleaner, Labourer	4728	55th Battalion
Atkinson, William	Tram Guard	2552	53rd Battalion
Avery, John Bede	Tram Guard, Conductor	3005A	14th Field Artillery Bgde
Ayres, Charles Thomas	Tram Guard	3002	55th Battalion
Bailey, Alfred	Engineer	597	3rd Battalion
Banks, Arthur John	Cleaner	4731	49th Battalion
Bannister, Albert George	Electrician	1657	19th Battalion
Barrett, Herbert Richard	Tram Conductor	836	30th Battalion
Beattie, William	Tram Conductor	1142	20th Battalion
Beaumont, Walter Henry	Tram Driver	3022	17th Battalion
Beith, William	Labourer	3038A	56th Battalion
Bell, John George	Conductor	135	2nd Battalion
Bennett, Frederick Thomas	Labourer	2581	56th Battalion
Bernard, Ernest Edward	Tram Conductor	3025	Trench Mortar Battery
Bird, Cuthbert	Tram Conductor	588	13th Battalion
Blackburn, Horace Samuel	Clerk	3657	55th Battalion
Bowman, Charles	Tram Conductor	729	35th Battalion
Brain, Sydney George Herbert	Furnace Man	6227	2nd Battalion
Briggs, Frank	Tram Conductor	3762	17th Battalion
Brown, Aubrey Edward Furnell	Clerk	6406	19th Battalion
Brown, Francis Cecil	Tram Conductor	3212	55th Battalion
Brown, James Stuart Douglas	Clerk	2581	17th Battalion
Brown, William Edward Charles	Electrical Engineer	1925	57th Battalion
Bruce, Thomas Fraser	Tram Conductor	1069	36th Battalion
Bryant, Frederick James	Tram Conductor	2103	4th Battalion
Bull, Stanley Gane	Motor Cleaner	8621	2nd Battalion

Name	Tramway Occupation	Serial No	Military Unit
Burgin, Christopher Collins	Conductor	6058	20th Battalion
Burne, Raynald Knightly	Tram Driver	129	1st Battalion
Burns, Patrick James	Labourer	1110	1st Battalion
Burrgram, Arthur Henry	Tram Driver	2858	60th Battalion
Bush, Clarence Vivian Roy	Tram Conductor	387	4th Battalion
Cameron, Robert Singleton	Tram Guard	2885	45th Battalion
Cameron, Roy	Cleaner	3028	55th Battalion
Campbell, Murdock Cameron Prentice	Tram Conductor	2878	59th Battalion
Campbell, Oliver James	Tram Driver	Lieut	20th Battalion
Campbell, Robert Hector	Labourer	3038	3rd Battalion
Cane, Arthur Samuel	Electrical Junior	3221	55th Battalion
Carpenter, John William	Tram Guard	665	33rd Battalion
Carroll, John W.	Clerical Assistant	2191	33rd Battalion
Carter, Joseph Elisha	Fuelman (White Bay P H)	6282	17th Battalion
Cavanagh, Martin John	Tram Conductor	6382	1st Battalion
Chadwick, Harry	Tram Conductor	313	3rd Battalion
Chambers, Keith	Labourer	239	4th Battalion
Chell, George Charles	Tram Conductor	6059	20th Battalion
Clark, Alfred Cottoral	Tram Conductor	32	2nd Battalion
Clark, Ernest David	Tram Conductor	1672	5th Lt Trench Mortar Batt
Clarke, Henry	Tram Driver	3745	2nd Battalion
Clarke, Norman Windsor	Cleaner	2195A	3rd Battalion
Clifford, Charles	Clerk	4386	20th Battalion
Clifford, Frank	No employment record		8th Battalion – No record
Collins, Martin	Tram Conductor	1521	19th Battalion
Collins, Peter Joseph	Tram Conductor	3039	53rd Battalion
Cork, Aubrey Foster	Tram Conductor	23278	1st Divn Ammunition Col
Corkhill, Norman Asher	Electrical Junior	4378	30th Battalion
Coulter, Alexander	Labourer	4395	18th Battalion
Crake, George Cecil	Conductor	199	1st Aust Light Horse Regt
Crooks, Thomas	Tram Conductor	3043	55th Battalion
Cunningham, Walter Manning	Tram Conductor	408	36th Battalion
D'Arcy-Irvine, Carol	Tram Conductor	1303	13th Battalion
Daly, Francis Michael	Tram Conductor	249	1st Field Artillery Brigade
Davis, Cecil Frederick Henry	Tram Conductor	8736	5th Battalion
Davis, Wilfred	Tram Conductor	1180	17th Battalion
Dewar, Robert Arthur	Tram Conductor	3047	55th Battalion
Donehue, Archie Victor	Tram Driver	212	1st Battalion
Douglas, Percy	Conductor	537	3rd Battalion
Dreves, Arthur Wellesley	Labourer	114	3rd Battalion
Dunn, William Payton	Tram Conductor	2359	17th Battalion
Durack, Thomas John	Cleaner	1683	18th Battalion
Edwards, Edmund John	Conductor	3056	55th Battalion
Elliot, Dudley Sinclair	Electric Motor Driver	303	35th Battalion
Ellis, Harry	Tram Conductor	1919	18th Battalion
Elrick, James Robertson	Tram Conductor	3228	55th Battalion
Fahey, Patrick William	Cleaner	3060	55th Battalion
Fairham, Henry Harnam	Turner's Labourer	54	1st Field Engineers
Farrell, James Vernon	Tram Conductor	1358	5th Machine Gun Coy
Ferguson, Logie	Tram Conductor	1924B	18th Battalion
Field, Herbert	No employment record		30th Battalion – No record
Finley, Arthur	Cleaner	3828	17th Battalion
Finn, William Edmund	Tram Conductor	2591	4th Battalion

Name	Tramway Occupation	Serial No	Military Unit
Finnie, Alexander	Sheet Metal Worker	20	4th Squadron Flying Corps
Fisher, Henry	Conductor	849	2nd Battalion
Fitzpatrick, James Patrick Aloysius	Labourer	2424	45th Battalion
Flatley, Martin	Chainman	8593	1st Field Coy Engineers
Fleming, Clifford Francis	Surveyor Chainman	1944	4th Battalion
Fleming, Edward Sandilands	Storeman	3834	17th Battalion
Flower, Reginald Owen	Tram Conductor	826	1st Battalion
Flynn, Thomas Joseph	Electric Driver	138	1st Battalion
Foote, George Reginald Vivian	Shop Boy	1944	3rd Battalion
Forbes, Andrew John	Tram Guard	3496	53rd battalion
Ford, Paul	Clerk	7581	5th Field Artillery Brigade
Freer, Percy William	Tram Conductor	1164	1st Battalion
Funkenstein, Henry	Labourer	846	2nd Battalion
Gambling, Alfred Astley	Carpenter	389	3rd Battalion
Gardner, John Archibald	Clerk	2139	3rd Battalion
Gell, John	Conductor	1167	4th Battalion
Gibbs, George Henry	Conductor	212	1st Battalion
Gilmour, Egbert Day	Tram Driver	4361	33rd Battalion
Glynn, Grenfell Harry	Tram Conductor	3517	55th Battalion
Godbee, Keith Randolph	Conductor	3165	35th Battalion
Goodall, James Robert	Conductor	2839	1st Battalion
Goode, George Norman	Tram Conductor	329	3rd Battalion
Goodyer, Robert Adrian	Linesman's Labourer	5047	19th Battalion
Goold, Francis Alexander	Labourer	1807	35th Battalion
Gould, Thomas Henry	Tram Conductor	3239	53rd Battalion
Gowenlock, Ernest Stanley	Tram Conductor	3901	57th Battalion
Greayer, Joseph	Labourer	4122	17th Battalion
Griffen, James	Labourer	4422	19th Battalion
Gullen, Richard John Henry	Labourer	6307	18th Battalion
Haddow, David Eastwood Sydney	Pitman	632	2nd Battalion
Hanrahan, Thomas Frederick	Labourer	634	1st Battalion
Hanson, George Edward	Tram Conductor	3087	17th Battalion
Hardy, Edward Caro	Tram Guard	618	1st Battalion
Hargrave, Geoffrey Lewis	Jr Draftsman Engineering	41	13th Battalion
Harman, William Henry	Cleaner	239	17th Battalion
Harper, Cecil Oswald	Junior Clerk	3337	53rd Battalion
Harris, James Harold	Electrician's Labourer	2431	45th Battalion
Harris, Sidney	Conductor	408B	4th Field Artillery Brigade
Hart, Frederick	Labourer	1224	17th Battalion
Hart, Michael Patrick	Conductor	896	20th Battalion
Hartman, Stanley Theo Victor William	Labourer	3061	54th Battalion
Hartnett, John R.	Tramway Clerk	17183	1st Howitzer Battery
Hay, David Cooke	Labourer	1567	2nd Battalion
Hayles, Noel Alfred Douglas	Tram Conductor	616	13th Battalion
Hendrick, John	Labourer	517	1st Battalion
Hennessey, Thomas Joseph	Tram Driver	1778	9th Battalion
Hennessey, John Albert	Clerk	902	36th Battalion
Hepple, William Edward	Boilermaker's Assistant	2322	34th Battalion
Hester, William	Tram Conductor	3243	55th Battalion
Hickey, Maurice James	Tram Conductor	3085	14th Field Artillery Brigade
Hills, Herbert Clarence	Car Cleaner	3754	1st Battalion
Hinson, Rupert Sykes	Tinsmith	25530	55th Battalion
Hockey, Cecil Percy	Tram Conductor	681	4th Battalion

Name	Tramway Occupation	Serial No	Military Unit
Hodgson, Henry	Tram Conductor	415	4th Battalion
Hogan, Patrick Francis	Labourer Engr for Twys	885	55th Battalion
Holden, James	Tram Guard	1162	1st Battalion
Hook, Harold John Thomas	Electrical	1712	2nd Battalion
Hopkins, Frederick Lisbon	Tram Conductor	949	1st Battalion
Horsfield, Frederick	Controllerman	3090	55th Battalion
Hoskings, Robert Millington	Tram Conductor	2564	39th Battalion
Hoskins, George Thomas	Carpenter	3388	45th Battalion
Howarth, John Falkiner Shepherd	Lifter's Assistant	142	4th Battalion
Hughes, Francis Henry	Tram Driver	9719	9th Field Ambulance
Hutchinson, Herbert Bruce	Electrical Running Gear	575	19th Battalion
Ibbott, Albert Edward	Tram Conductor	3539	55th Battalion
Jackson, Allan Herbert	Shop Boy	2303	20th Battalion
Jeffery, George Arthur	Cleaner	2850	56th Battalion
Jenkins, Robert	Labourer	3813	13th Battalion
Jephecott, Arthur Boobbyer	Electrical Mechanic	1380	18th Battalion
Johnson, Lawrence Leslie	Tram Conductor	106	36th Battalion
Jolley, Bertram Carr	Car Cleaner	3063	56th Battalion
Jones, Alfred	Tram Driver	3814	3rd Battalion
Jones, Evan	Tram Conductor	2075	30th Battalion
Jones, George Ernest Walter	Tram Conductor	79	19th Battalion
Jones, Herman Hill	Tram Conductor	1096	13th Battalion
Jones, John	Conductor	594	20th Battalion
Jones, Sidney Fisher	Linesman's Labourer	1970	4th Battalion
Kidson, Alfred de Vere	Survey Draftsman	19380	56th Battalion
Kissell, John	Twy Foreman, Inspector	3102	13th Field Artillery Brigade
Landaman, Albert Edward	Tram Conductor	3260	5th Pioneers Battalion
Larkins, John Joseph	Motor Cleaner	2148	31st Battalion
Latter, Albert Charles	Controllerman	5783	3rd Battalion
Lavers, William Vincent	Tram Conductor	3105	13th Field Artillery Brigade
Lawrence, Francis John	Labourer	3258	17th Battalion
Lee, Herbert J.	Conductor	---	Imperial Reservist
Lee, Robert Augustus	Pitman's Assistant	317	1st Battalion
Leeder, Reginald Gordon	Tram Conductor	284	13th Battalion
Lenan, George	Tram Conductor	406	13th Battalion
Lennie, James	Tram Guard	19	18th Battalion
Little, Robert Hugh	Tram Conductor	4152	17th Battalion
Lyons, John Maher	Tram Conductor	605	17th Battalion
Mackley Thomas	Tram Conductor	2492	1st Battalion
Mainstone, Arthur	Tram Conductor	736	19th Battalion
Mair, Thomas Newell	Tram Guard, Conductor	10	13th Field Ambulance
Maitland, Harold George Musgrove	Tram Conductor	3823	4th Battalion
Malcolm, Errol Gordon Bruce	Labourer	611	5th Lt Trench Mortar Batty
Malone, William Thomas	Tram Conductor	6359	18th Battalion
Manson, Alexander	Tram Conductor	2170A	3rd Battalion
Manton, Alfred Ernest	Clerk	472A	1st Battalion
Martin, Frank	Tram Driver	3826	4th Battalion
Matchett, Henry Wilson	Tram Conductor	1579	3rd Battalion
Mathers, Thomas	Tram Conductor	3502	53rd Battalion
McCord, Thomas Harold	Tram Driver	1975	17th Battalion
McCulloch, William Lindsay	Tram Conductor	955	17th Battalion
McDonald, Archibald Aubrey	Cleaner	1791	2nd Battalion
McDonald, William Thomas	Electrical Engineer	3	4th Battalion

Name	Tramway Occupation	Serial No	Military Unit
McFarlane, John	Tram Driver	4584	18th Battalion
McGorin, James Frederick	Clerk	33929	5th Field Artillery Brigade
McGuirk, Thomas Alexander	Tram Conductor	911	3rd Battalion
Mackenzie, Thomas	Tram Driver	16133	12th Field Ambulance
McKinnon, Malcolm McLeod	Tram Conductor	3185	4th Battalion
McLachlan, John Henry	Conductor	481	1st Battalion
McLeod, William Edward	Bogie Fitter Tramways	3121	53rd Battalion
McTaggart, John	Conductor	633	33rd Battalion
Meggison, Harry	Labourer	4367	2nd Battalion
Mellings, John Lawley	Electrical Mechanic	1738	19th Battalion
Meyer, Frederick Herman George	Tram Conductor	3138	55th Battalion
Milner, Reginald	Packer Perway Railways	4780	17th Battalion
Montgomery, George	Tram Conductor	5079	33rd Battalion
Morgan, George William	Wood Machinist	5423	63rd Battalion
Morris, George Alfred	Fitter's Assistant	1149	3rd Battalion
Munro, Duncan Keith	Electrical Junior	2908	1st Pioneer Battalion
Nicholl, John William	Tramway Fettler	3587	53rd Battalion
Nicholls, Arthur	Tram Conductor	2878	14th Lt Trench Mortar Bat
Nolan, John Christopher	Labourer	4492	20th Battalion
O'Connor, Maurice	Labourer	3606	56th Battalion
O'Farrell, James Patrick	Labourer	111	4th Battalion
O'Neil, Fitzgerald	Tram Driver	6808	7th Battalion
Olley, Laurence	Tram Conductor	1741	18th Battalion
Palmer, Charles Leo	Tram Conductor	754	17th Battalion
Paris, Robert	Labourer Perway Twys	6067	4th Battalion
Parr, George Joseph	Electric Driver	726	1st Battalion
Pearce, Charles	Tram Conductor	2962	59th Battalion
Peebles, James Hector	Fitter's Assistant	4314	45th Battalion
Perry, Arthur Rhodes	Electrician	3447	53rd Battalion
Perry, Charles	Tram Conductor	2668	2nd Battalion
Plumb, Richard Joseph	Tram Conductor	4810A	53rd Battalion
Pugh, William Joseph	Mechanic's Assistant	2176	36th Battalion
Putland Wesley James Ethersey	Conductor	470	1st Battalion
Quilter, Richard William	Tram Conductor	2001	9th Battalion
Raine, Thomas Frederick	Tram Conductor	3162	17th Battalion
Reboul, Edward Marius Thomas	Clerk	6801	13th Battalion
Redford, John Alan	Conductor	99	1st Battalion
Redman, Reuben Joseph	Electrical Engineer	00	Recruits
Richardson, George Edward	Labourer	198	35th Battalion
Riley, John	Cleaner	2221	3rd Battalion
Ritchie, Robert	Conductor	98	3rd Machine Gun Battn
Rixon, George Vincent	Tram Conductor	87	13th Battalion
Roberts, Albert Whatman	Fitter	59168	'D' Company Recruits
Robertson, William George Weston	Tram Conductor	1046	4th Battalion
Robins, William John	Tram Driver	3915	17th Battalion
Robinson, Thomas Gifford	Tram Guard	2679	13th Battalion
Rogers, Hubert Henry Saunders	Tram Cleaner	3244A	56th Battalion
Rogerson, George	Tram Driver	212	11th Battalion
Rowland, Frederick Charles	Toolboy Tramways	2779	18th Battalion
Rowlinson, Stanley	Labourer	648	19th Battalion
Rowsell, William Henry	Tram Conductor	595	1st Battalion
Ryan, Albert Edward	Tram Conductor	648	17th Battalion
Sainty, Frederick Leslie	Electrical Engineer	2426	1st Field Coy Engineers
Salmon, Francis Henry Burdett	Electrician	2220	20th Battalion

Name	Tramway Occupation	Serial No	Military Unit
Sampson, Arthur George	Tram Driver	3132	1st Field Artillery Brigade
Sandilands, Claude Fairfax	Tram Conductor	680	2nd Battalion
Saunders, Walter Geoffrey	Train Guard	6667	5th Mechanical Tpt Coy
Scobie, Walter Farnes	Electrical Engineer	---	4th Pioneer Battalion
Sculley, Charles Edward	Tram Conductor	2481	4th Battalion
Seale, Frank Lancelot	Electrical Engineer	18744	7th Field Artillery Brigade
Senior, Sachaveral George	Draftsman	2224	3rd Battalion
Shanahan, Patrick John	Clerk	5425	Imperial Reservist
Shannon, Edwin Herbert	Construction Linesman	40	20th Pioneer Battalion
Shean, John / Sheehan, John Gregory	Labourer	3930	17th Battalion
Sherbourne, Lafayette Alonzo	Tram Conductor	312	4th Battalion
Silk, Reuben Henry	Labourer	1734	56th Battalion
Smith, Charles William	Conductor	183	2nd Battalion
Smith, George Thomas	Tram Conductor	182	3rd Battalion
Smith, Henry	Labourer Tramway	3290	17th Battalion
Smith, John Stephen	Labourer	6142	19th Battalion
Smith, Michael Ernest	Labourer	4530	19th Battalion
Smith, William Alfred Charles	Pitman's Assistant	4834	17th Battalion
Spillane, Thomas Francis	Controllerman	1001	17th Battalion
Stach, Vincent Alexander	Conductor	898	2nd Battalion
Starr, Walter	Pitman's Assistant	3911	13th Battalion
Steavens, John Edward	Tram Driver	3171	17th Battalion
Stephen, George Thomas	Tram Conductor	129	1st Division Signal Coy
Stewart, Selby Albert Shepherd	Cleaner	345	1st Battalion
Strafford, Thomas Francis	Shop Boy	4261A	2nd Battalion
Styles, Charles Henry	Labourer	3256	6th Railway Operating Coy
Sullivan, Francis Joseph	Lineman's Labourer	3096	17th Battalion
Sullivan, Sydney John	Conductor	6750	3rd Aust General Hospital
Summers, William Wiggin.	Labourer	81	1st Field Ambulance
Swann, Frederick Herbert Joseph	Electrician	3926	27th Battalion
Swanson, Henry William	Tram Conductor	5210	54th Battalion
Talbot, Harry	Labourer	4276	2nd Battalion
Taylor, Edward Barton	Plate Layer, Labourer	2242	45th Battalion
Taylor, George Henry	Cleaner	2175	47th Battalion
Taylor, Richard Hamilton	Conductor	3630	2nd Trench Mortar Brigade
Teakel, Clarence	Engine Cleaner, Fireman	2464	30th Battalion
Thelning, William Patrick Philip	Tool Collector	2759	30th Battalion
Thompson, Bernard Rudd	Tram Conductor	25552	105th Howitzer Battery
Tickner, Charles Lewis	Tram Conductor	12	4th Battalion
Tiedeman, John Arthur Vale	Tram Conductor	32073	4th Lt Trench Mortar Batt
Tier, William Bernard	Tram Conductor	3187	53rd Battalion
Tonner, James Edward	Conductor	20894	8th Battalion
Twigden, George William	Mechanical Engineer	Lieut	4th Field Coy Engineers
Uebel, Charles Alexander	Tram Driver	3194	19th Battalion
Upjohn, Edward Henry	Conductor	2040	2nd Battalion
Upton, Clarence Lancelot	Electrician	2010	53rd Battalion
Wailles, Charles Edward	Electrical Engineer	2616	7th Field Coy Engineers
Walsh, Thomas H.	Tram Conductor	3196	55th Battalion
Walter, William Guy Ardagh	Engineers Draftsman	3076	16th Battalion
Ward, Charles Alfred	Turner's Labourer	2080	2nd Battalion
Warren, Frederick Charles	Tram Conductor	898	36th Battalion
Watkins, Walter Earnest	Tram Conductor	3445	1st Pioneer Battalion
Watson, Clarence Stanley	Electrical Engineer	3654	55th Battalion
Watson, Robert Edward	Engineer	5104	30th Battalion

Name	Tramway Occupation	Serial No	Military Unit
Waugh, Charles George	Storekeeper	3647	17th Battalion
Wells, Daniel	Electrical Mechanic	2216	13th Battalion
West, Samuel	Labourer	3648	20th Battalion
Whalan, Richard Percy	Conductor, Tram Guard	477	1st Machine Gun Coy
Whatton, Ernest W.	Labourer	2040	13th Battalion
White, Richard Thomas	Clerk	5963	18th Battalion
Whitnall, Alexander Charles	Conductor	3308	55th Battalion
Williams, Austin Aloysius	Pitman's Assistant	3953	17th Battalion
Williams, James	Tram Driver	9080	8th Field Ambulance
Wilson, Albert Arthur	Tram Conductor	760	1st Battalion
Wilson, William Clark	Tram Cleaner	2029	HQ 2nd Division
Winder, Stanley Hamilton	Clerk	1852	3rd Battalion
Wood, Evelyn Arthur	Checker	545	4th Battalion
Worsnip, James	Conductor	4267	17th Battalion
Young, Reginald Harold Howard	Tram Guard, Conductor	6821	4th Battalion
Zucker, William S.	Clerk	53834	13th Battalion

A number of Tramway men who were killed in action are not listed in the 1921 Annual Report. They are:

Name	Tramway Occupation	Serial No	Military Unit
Burns, Robert Howell	Machinist	2380	55th Battalion.
Connors, William Jas Clarence	Fitter's Mate	130	30th Battalion
Davey, Herbert	Clerk	523	19th Battalion
Falle, Leslie Phillip	Tram Conductor	850	19th Battalion
Farrell, John Phillip O.	Cadet Rly Construction	31691	3rd Field Artillery Brigade
Fox, William	Labourer	579	30th Battalion
Seymour, Richard Rolland	Shop Boy	9767	1st Field Ambulance
Watson, Leonard Leslie	Storeman	4924	53rd Battalion
Wright, Frank.	Labourer	2875	19th Battalion

Tramway men who enlisted under a false name or who were discharged and re-enlisted are also not included in the Annual Report listing. They are:

Name	Tramway Occupation	Serial No	Military Unit
Christie, Alfred Bembrick enlisted as Alfred Delaney	Electrical Engineer Jnr	1520 / 1583	4th Battalion
Collins, John Patrick enlisted as John Rodgers	Clerk	523	19th Battalion
Hill, William John	Tram Conductor	133	59th Battalion

Tramway men who died of disease or other cause, or who contracted Pneumonia / Influenza ("Spanish Flu") during their military service and died after discharge are also not listed in the Annual Report.

Name	Tramway Occupation	Serial No	Military Unit
Beck, Francis	Junior Clerk	Not issued	4th Battalion
Cork, Aubrey Foster.	Tram Conductor	23278	1st Div Ammunition Col
Lardner, Robert Arthur	Blacksmith	29306	6th Field Artillery Brigade
Lavender, George	Labourer	3822	9th Battalion

Tramway men shown as deceased on war memorials or honour rolls who did not die during the war:

Name	Tramway Occupation	Serial No	Military Unit
Butler, Allan	Tram Driver	4348	3rd General Hospital
Field, Herbert	No employment record		30th Battln – No record
Healey, Alfred Edward	Tram Conductor	5839	17th Battalion

If any reader has an ancestor in this list, please contact the editor by email at robert.merchant@bigpond.com for more information.

Variotram 2107 acquired for NSW State Movable Heritage Collection

From *The Sector Report*

With the assistance of Transport for NSW (TfNSW), Variotram 2107 has been acquired to join the New South Wales State Moveable Heritage Collection – the latest piece of rolling stock to be added and the very first tram to be included in this significant collection.

Sydney's Variotrams heralded a game-changing step forward in tram design and technology when introduced in 1997. They were the first low floor trams in Australia. Melbourne did not receive its first imported examples until 2001.

Sydney once had the second largest tramway network in the British Commonwealth. Along with many cities in the English-speaking world, it scrapped its last trams in 1961 in favour of buses.

Under a 'Better Cities' programme, the NSW Government took the initiative, together with the Commonwealth Government, to fund the reintroduction of trams (or light rail) on a short starter line from Central Station to Wentworth Park, utilising part of the disused railway goods line. The chosen vehicle, the Variotram, built in Australia, as derived from a prototype of European design, It required major redesign to meet Sydney conditions, such as use of stainless steel, enhanced air conditioning and alterations to negotiate the gradients and curves around Central Station.

When introduced into service, the five-section articulated Variotrams were the longest trams in Australia at 28.9 metres. This led the way to a trend towards trams much longer, and therefore with higher capacity, being introduced elsewhere in Australia. Seven were built and operated successfully for 17 years before being retired.

The success of the Variotram on the starter line resulted in two service extensions on the same line. This led to a decision to build a new line along George Street and to the eastern Suburbs, as well as other proposals for lines elsewhere in the state and Canberra.

Being the first of the second generation of electric tramcar in Sydney, the Variotram is an integral part of NSW's transport history. It warrants preservation as part of the narrative in major tramway design developments no less than the first generation of electric trams introduced on George Street in 1899 or the large capacity 'toastracks' of 1908.

Tram 2107 was the last of the fleet in service and was deemed the most reliable. Therefore, it has been chosen for preservation in the New South Wales State Movable Heritage Collection.

The tram has been placed in the custody of the South Pacific Electric Railway, and will be displayed and operated at the Sydney Tramway Museum.



Variotram 2107 on the Down near the crossover between Rozelle Bay and Lilyfield on 26 July 2000 with driver and Sydney Tramway Museum member Ted Gay. Ieva Gay



Variotram 2107 passing Paddy's Markets bound for Wentworth Park in January 1999. Hayden Ramsdale



Variotram 2107 inbound at Star City in the late 1990s. Metro Light Rail



Variotram 2107 at the terminus at Dulwich Hill. Vic Solomons

Originally published in *Electrical Engineer of Australia and New Zealand*, 15 August 1927.

NEW BOGIE CAR FOR MELBOURNE TRAMWAYS

The Melbourne and Metropolitan Tramways Board has recently constructed a car of the double end, closed, bogie type, which is new to Australia, though fairly common in some parts of America. It is to be tried out on the various routes in order to ascertain its suitability for traffic in Melbourne and suburbs. The car was designed by the engineering staff of the Tramways Board, and built in the Board's workshops at Preston. Its special features are the low, one-level floor, front and centre entrance and exit, internal well steps, safety devices and pneumatically operated doors. It differs also from other bogie cars, operated by the Board in having an all-steel framework, and in the provision of cross seats, louvred sun shades in lieu of blinds, adjustable motorman's windows, and anti-climbers on the bumpers. It is intended for operation with either a one-man or a two-man crew.

The car body is 33ft. 6in. long over corner posts, and the length over bumpers is 45ft. 6in. The width is 8ft. 4 in. and the end platforms are each 5ft. 6in. long. The underframe consists of 3in. x 3in. x $\frac{3}{8}$ in. angle side sills reinforced at the bolsters and centre doors, 7in. x $2\frac{1}{2}$ in. x $9\frac{3}{4}$ lb. channel end sills and 4in. x 2in. x 7lb. channel floor bearers. The platforms are supported on the door sides by 7in. x 3in. x $14\frac{1}{2}$ lb. channel platform sills and on the other side by the side sill and side girder construction carried beyond the corner posts. The side and roof framing has 2in. x 2in. x $\frac{3}{16}$ in. tee side posts and 3in. x 2in. x $\frac{3}{16}$ in. angle corner posts extending from the side sill to the side or top plate angle, with a $14\frac{1}{2}$ in. pier at the centre and corner posts. The steel carlines at each side post and pier are of $1\frac{1}{2}$ in x $1\frac{1}{2}$ in. x $\frac{3}{16}$ in. tee inverted. The strength of the framework lies in the girder construction of the sides. The side sill is the lower member and the belt rail of 3in. x 1in. x $\frac{5}{16}$ in. angle, and side plate of $3\frac{1}{2}$ in. x $2\frac{1}{2}$ in. x $\frac{1}{4}$ in. angle constitute the upper members, with a sheathing plate of 14 s.w.g. steel. The letter-board is of 16 s.w.g. steel, and the outlines for doors and windows are curved in form and pressed to shape.

The car roof is of the Board's standard type, arched in form, with the centre portion raised 2in. for the full length for ventilation. The roof boards, of $2\frac{1}{2}$ in. x $\frac{3}{8}$ in. tongue and grooved Oregon, are screwed to furring on the steel carlines and to intermediate wooden carlines. The roof covering is of jute canvas. The side windows sashes and louvres drop into pockets, and are arranged with a minimum thickness of pillar. The upper sash is hinged at the bottom for ventilation. The side windows

on the platforms are fixed, but the front windows drop and may be fixed at any desired opening.

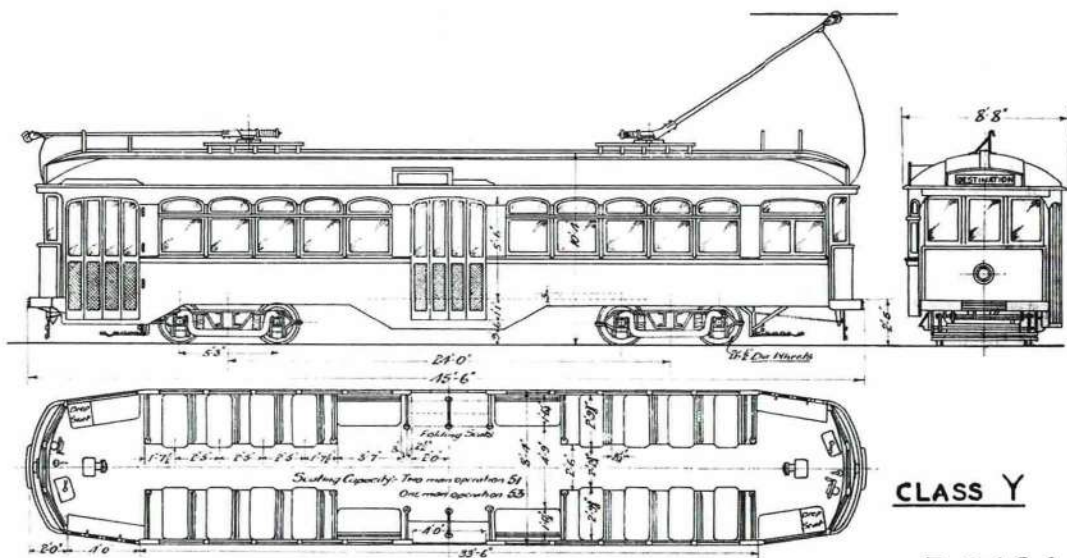
The floor is at one level through platform, passage way and centre of car, with a 3in. rise at the cross seats, which are over the wheels. The flooring is of $\frac{7}{8}$ in. t. and g. covered with malthoid floor covering. In the body of the car the seats are placed transversely, and are reversible, but on the platforms and at the centre they are longitudinal, providing ample room for movement around the doors. The step wells on the off side of the car are covered by folding seats. The car will seat 54 passengers. Stanchions of 1-in. tubing at the doorways and at the end of the raised floor provide ample grab-rail accommodation.

The four doors are operated by overhead door engines controlled by the motorman. They are of the safety car type, i.e. the car cannot be started with the doors open, and the doors cannot be opened until the car has stopped. The doors open inwards into the step wells, so there are no steps or doors projecting beyond the body outline.

The trucks are of the Board's equal traction type with slight modifications. The wheel base is 5ft. 3in. and the wheels are 26in. diameter. The 40-hp. motors are installed on each truck. The weight of the car completely equipped is 3,800lb.

The controllers are of the four-motor type, fitted with dead man handle, and operated in conjunction with a line breaker fitted with pneumatic circuit opening device. If the motorman releases his hand from the controller handle air is supplied to the pneumatic circuit-opening device on the line breaker, cutting off the current. At the same time the brakes are automatically applied, the rails sanded, and the doors all thrown into the balanced position so they can be operated by hand. A foot valve is fitted which works in conjunction with the dead man's handle. This is to allow the motorman to remove his hand from the handle for short periods to collect fares, etc.

The brakes are of the Westinghouse straight air brake type. The brake valve has a special feature for opening and closing the doors, so arranged that the doors can only be opened when the brakes are applied and closed when they are released.



CLASS Y
R 2464

HERE AND THERE

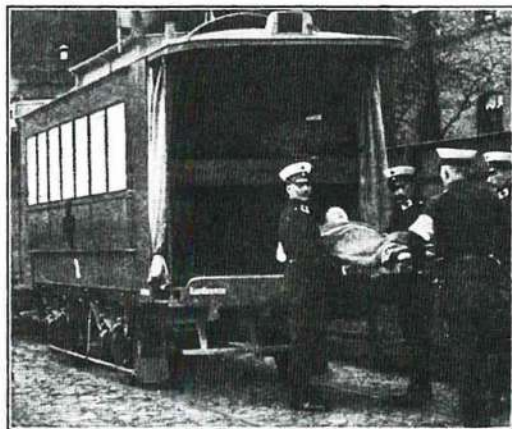
AUSTRALIAN AND OVERSEAS NEWS

Ambulance trams in World War I

Sydney was not the only city to operate ambulance trams during World War I. The German city of Hanover did too, as reported on page 235 of the 7 August 1915 issue of *Electric Railway Journal*.

Ambulance Trailers in Hanover

The street railway in Hanover has been rendering valuable aid to the authorities in transporting wounded soldiers from the railroad station to the several hospitals in the city in small trailer cars like the one shown in the accompanying illustration. The bodies were prepared for their purpose by removing the ends and mounting angle-irons near the floor and at the height of the window sills. On these, acting as rails, small trucks were placed upon which the stretchers carrying the wounded soldiers could readily be rolled into place. Each trailer accommodates eight stretchers, the length of the body being about 16½ ft. The ends are closed with sail-cloth curtains.



Hanover cars for transporting wounded soldiers.
Electric Railway Journal

The company has been operating eight of these trailers and some weeks ago had already transported more than 7000 men.

Melbourne Ws and restaurant trams

Two successive announcements by Yarra Trams have resulted in major changes to the operation of W series trams in Melbourne.

On 27 September it was announced to employees that all W cars other than W8s would be withdrawn at once. It was stated that “non-upgraded W Class trams would be removed so that they can undergo restoration and important safety upgrades.”

This resulted in an immediate reduction in City Circle services, with the available fleet reduced to the six existing W8 cars. It was stated that the City Circle service would be supplemented from 15 October by the operation of additional A class trams on route 30, along Latrobe Street.

The announcement also meant the immediate disappearance from Melbourne streets of the distinctive colour scheme of burgundy, cream and gold introduced with the City Circle service in April 1994.

Three W8 conversions are currently under way at Bendigo, with three more to follow by 2020.

The 27 September announcement said that before the end of the year, the restaurant trams would need to be upgraded. It said that that Public Transport Victoria and Yarra Trams had been in discussions with the company that operates the restaurant trams to identify options for their continued operation.

However less than four weeks later, on 19 October, another Yarra Trams announcement to employees said

that the three restaurant trams had been suspended from service on the network, “and may temporarily operate as a stationary dining experience on siding tracks at Port Junction”. The announcement said that condition assessments had found that “the wooden structural elements of these vintage trams are badly weathered, compromising their integrity in a collision.”

The statement said “we will continue to support the Colonial Tramcar Restaurant operators in returning restaurant trams to the network in the future”.

The Colonial Tramcar Restaurant issued a protest statement on the following day, 20 October, seeking urgent intervention from the Victorian Government.

It said “we reject suggestions from Yarra Trams that our iconic rolling restaurants are not safe. Yarra Trams has inspected our trams weekly since 2010 and up until two weeks ago had given us the all clear to run. How can we go from safe one week to unsafe the next?”

It said that Bendigo Workshops were unable to schedule the restaurant trams into the W8 program until 2020.

“We are calling on Minister Allan to urgently intervene and set a deadline which will actually be possible to meet so that we can convert our trams to the department’s new standards and save the jobs of more than 60 Victorians.”

Restaurant tram 938 in Bourke Street on 21 December 2017.
Mal Rowe





SW5 728, one of the original fleet of City Circle cars, displays its burgundy, cream and gold colours in this November 2007 view. Dale Budd

Behind W8 1010, a line of non-upgraded City Circle cars are stowed at the far end of the tracks at Southbank Depot on 8 October 2018. Mal Rowe



Adelaide's Botanic Gardens line opens

Adelaide's Botanic Gardens tram line finally opened on Saturday 13 October 2018. The first tram, Flexicity 114, left the Adelaide Entertainment Centre for the Botanic Gardens at 7:03am, seven months after the line was originally expected to open and two and a half months after the cancelled opening date of 29 July 2018. It was a low-key affair without the usual official opening.

South Australia's Transport Minister, Stephan Knoll, said the subdued start took place because the July opening had to be cancelled because of problems with the signalling system at the King William Street - North Terrace intersection. Engineers from Hanning and

Kahl, the firm that supplied the signalling equipment, were flown from Germany to examine the system and identify the fault, which is thought to have been in the underground cabling. After it was repaired, a lengthy period of driver training took place to familiarise drivers with the new signalling system.

No curves were laid to enable trams to turn right from King William Street into North Terrace. This means that passengers intending to travel to the Botanic Gardens from Glenelg and the southern end of the city are required to change trams at either the Adelaide Railway Station, City West or Royal Adelaide Hospital.



On Saturday 13 October 2018 the first tram, Flexity 114, arrives at the Art Gallery stop on North Terrace, one stop away from the Botanic Gardens terminus.

ABC News (Eugene Boisvert)

Citadis 209 (one of the three additional Citadis trams entering service in 2018) crosses King William Street heading to the Entertainment Centre from the Botanical Gardens, after performing the second service on the extension on 13 October 2018. Nic Benn



Flexity 101 sitting at the Festival Plaza terminus on Saturday 13 October 2018 having completed the first ever service along King William Road (north of North Terrace) this century. Nic Benn

Newcastle light rail

The first CAF Urbos 100 tram for Newcastle has arrived. It was taken by road to the port of Santander in Spain where it was loaded onto the Norwegian-flagged, roll-on roll-off ship Hoegh Jeddah.

After sailing to Australia via the Panama Canal the ship arrived at the port of Newcastle on 8 September and docked at West Basin 4 Berth at Carrington. It was unloaded the same day and remained next to the West Basin 4 Berth for several days. The tram completed the last leg of its journey to Wickham in the early hours of 12 September when it was taken by flat-bed semi-trailer to Hunter Street and winched onto rails just east of Worth Place. The tram was then towed west at walking pace by a small electric shunter through Honeysuckle and arrived at the Wickham stabling yard an hour after midnight.

The Newcastle trams are produced by CAF as an option under the Sydney Inner West light rail contract. The 33m long, 45-tonne Urbos 100 can carry a maximum of 270 people and will be the state's first trams with surfboard racks. The six-vehicle fleet will run between Wickham and Newcastle East through six stations.

Newcastle will be home to Australia's first completely wire-free light rail system, with each of the trams

carrying an on-board capacitor that is charged by an overhead bar at each stop. Regenerative braking will also allow for energy to be transferred back to the tram's onboard storage system.

Newcastle Transport operator Keolis Downer is in the final stages of choosing its first tram drivers. The initial plan is to employ 14 drivers, with another 10 staff working at the Wickham control centre. These 10 staff will also be qualified drivers to maximise operational flexibility. The company favours women as drivers. It claims they drive the trams with a lighter touch, making for a smoother ride for passengers. Careful driving also saves on maintenance costs because of less wear and tear on the vehicles.

Fares on the city's light rail system will start at \$2.20 for adults, \$1.10 for children, and \$1.10 for concession passengers using Opal cards. Cash tickets will be slightly more expensive, while passengers changing to trams from buses or trains will be charged another 20 cents to use the light rail service.

Powered testing started on the tram route in Newcastle on the night of October 22-23.

Daytime testing is expected to commence in the coming weeks, with opening of the 2.6 km route between Wickham and Pacific Park scheduled for early 2019.



CAF Urbos car 2151 undergoing commissioning at Newcastle light rail depot on 14 October 2018
Peter Gambling

Powered testing of light rail vehicles started in Newcastle on the night of 22-23 October.

Metro Report International



R 1753 has a new home

This tram now has a new home at Narrabeen, located close to the original tram terminus and heritage waiting shed. Trams last ran in this part of Sydney in 1939, when the Manly system was replaced by buses.

R 1753 was one of a number of tram bodies acquired from various locations by the enterprising group known as the City Tram Association. Chris O'Sullivan and Wayne Dempsey (both STM members) were key people involved. Six of the tram bodies were relocated with encouragement and support from Sydney City Council, and placed in the former Rozelle Tram depot with agreement from the then Minister for Transport, Bruce Baird. The group worked together on restoration of the bodies. However, during the latter half of the 1990s control of the tram sheds passed to the NSW Harness Racing Club, operator of Harold Park Paceway. This resulted in the group being locked out of the location.

The Council enlisted the help of Sydney Tramway Museum (STM) in an attempt to resolve the situation. In due course, ownership (but not access) to the tram bodies located at Rozelle together with another three R class bodies located in the nearby Council garbage depot and buildings at Wentworth Park, was formally passed to STM. In time, the tram bodies at Wentworth Park were moved to Loftus. However, two of the trams, Nos. 1741 and 1917, were sadly lost in the fire at the old site during 2015. The body of the third car, No. 1749, was restored by STM volunteers in 2001 and was exchanged with R1 2001, at Balmoral in the NSW Southern Highlands. Car 2001 was restored in Bendigo where it was repainted in the RAAF recruiting colours of 1953. It found its way to Loftus via Canberra.

After many meetings with councillors, a reference committee determined that one of the trams should

be retained in the proposed redevelopment at Rozelle. The Mirvac group became the developers of the whole tram shed and racecourse site and R1 1995 (as a former Rozelle tram and the last to run in Sydney) was selected by the committee as the car to be retained. The tram was sent to Bendigo for restoration as an adjunct to a bistro/restaurant, where it now resides.

Council invited interested parties to come forward with suggestions for how the other trams might be used. From this process two other cars were de-accessioned by STM – Nos. 1753 being proposed by the then Pittwater Council (now part of Northern Beaches Council) and R1 1993. Car 1993 was transferred to Bendigo where it was restored as a restaurant/take away cafe for a private development proposed in the Sydney Rocks area. Unfortunately, this proposal did not eventuate, and the fitted-out tram remains in private storage for the present.

This leaves car 1753. The car's original donors from an apple orchard near Bilpin had specified that if the initial proposal for 1753 did not proceed they would prefer the tram to be in the hands of STM. Thus, when Eliza Halsey, the senior project manager at Pittwater for the Narrabeen proposal became involved, the tram was de-accessioned and ownership transferred to that Council.

The badly vandalised body of 1753, which by then was in storage away from Rozelle, was duly inspected and delivery arranged in 2014 to send it to the Council's depot at Cromer in the northern beaches area of Sydney. The publicity for the project found a number of critics who stated that 'R type trams never ran' to Narrabeen 'so it was not authentic'. Fortunately, common sense prevailed, aided to some extent by an argument in favour presented by transport historian and author, Robert G Henderson.



R 1753 is the centrepiece of the Tramshed Cafe, beside Pittwater Road about 100 metres south of the former Narrabeen terminus. This view is looking towards Manly.
Marita Macrae

Eliza Halsey had located a 'Men's Shed' group in the area who willingly agreed to take on the restoration project. She arranged a bus trip of eleven interested people to visit Loftus, see our workshop and experience a ride on R 1740. Subsequently, there was close co-operation between the groups with Neil Brough, a former marine engineer representing the group and both Howard Clark and Richard Clarke, from STM involved.

Numerous items were manufactured or procured for the cosmetic restoration of 1753. Sample window glass was delivered to the glass supplier and a full set of matching toughened glass was made and delivered. Due to the problem obtaining replacement window tongs a decision was made to have the two centre windows in each saloon side opening, with those close to the bulkhead being fixed in position. The STM patternmaker made patterns for the three different window size tops.

The STM's casting contractor made the replacement window tops and their contract joiner, Ross Traeger, located a supplier of brass window lifters that were almost identical to originals. New canvas doors were made by another contractor in Marrickville, with Ross making the replacement timber door edges.

A pair of fire damaged unmotored No.12 Sydney bogies from the National Park were supplied to a Brookvale company which had them shot blasted and painted for placing under 1753.

The team carried out a huge amount of work, replacing and repairing rusted steel panels and replacing termite-infested timbers. Other parts were supplied as needed, such as number panels, headlight rims, original outline drawings and a couple of original front metal panels and handrails. Original paint samples were obtained,

and the end result looks highly authentic. STM member Dick Jones made up a couple of replica end destination rolls for the car, even though of course such cars never ventured north of The Spit.

The car was commissioned as the centrepiece of the Tramshed Cafe at Narrabeen at the end of April 2018.

We need to extend our congratulations to Eliza Halsey and her Council team, and to Neil Brough and his team for their dedicated effort. We hear 1753 is now a very busy and popular local cafe at Narrabeen.



The end saloons of the car are equipped with fixed tables and seats for cafe patrons, while the centre section is unchanged from its operational days. All three pictures were taken in May 2018.
Dale Budd



The tram seen from the south. It is protected from the weather by a large roof.
Dale Budd

Tram gets new life as pub's exciting new addition

Once taking passengers on their daily commute through Berlin, four-wheel trailer 3717, built in 1969, is again serving the community. Located in the car park of O'Donoghues, an Irish pub at Emu Plains in western Sydney, the tram has become the watering hole's newest attraction after it was fitted out with a kitchen and bar.

The car came to the Sydney Tramway Museum from Berlin in 1996 but was de-accessioned some time ago. It passed to O'Donoghues via Mario Mencigar of Australian Train Movers.

The project had a small beginning according to the hotel's Marketing and Events Manager, James Crowe. "We started with a concept that we wanted to have a caravan kitchen or a food truck, but the idea just took

off, and now it has turned into something much bigger than we initially intended," Mr Crowe said. "Penrith is starting to have more of a night life and we want to be part of that."

A naming competition was held for the tram, and the pub received over 300 worthy entries, but in the end Mr Crowe and his team decided to go with something simple: The Carriage. "I think The Carriage is a name that is catchy and tells you what it is, and I think it's got a lasting appeal."

"We're going to have a basic menu. It's going to be street food, things you can essentially hold in one hand with a drink in the other," Mr Crowe said.

No. 3717 entered service at the pub on 2 February 2018. A glimpse of the tram in its new home can be seen at <https://www.odonoghues.com.au/>

A view of the Berlin car located within the car park at O'Donoghues, Emu Plains.
Robert Merchant



Berlin trailer 3717, "The Carriage", seen from Station Street, Emu Plains. The tram is visible from passing trains.

Robert Merchant

Rozelle Tram Depot's War Memorial

The War Memorial formerly located in the award-winning gardens beside Rozelle Tram Depot is to be returned to somewhere near that location in time for the centenary of the Armistice on 11 November 2018. The soldier has been undergoing restoration by a specialist conservator.

The Memorial was unveiled on 26 November 1916. It was commissioned by the depot staff and was cast in cement by Irish-Australian sculptor Edwin McGowan. The statue was the first in Australia to depict a digger and the first to be installed at a workplace. Unusually,

the statue depicts a soldier in a relaxed pose, with an open collar and rolled up sleeves.

When Rozelle Depot closed in 1958, the statue was moved to the nearby Leichhardt Bus Depot, where it was placed on a much lower brick plinth with the original bronze plaques attached.

In 2016 the CEO of the City of Sydney hosted a meeting which included representatives of the State Transit Authority, Returned Services League and the Glebe Society. The City graciously agreed to refurbish and relocate the Memorial as the recent transformation of the former depot as the Tramsheds dining precinct revived interest in the area's industrial and wartime history.



Left:
The War Memorial after its transfer to Leichhardt Bus Depot.
Ian MaCcowan

An early view of the War Memorial at Rozelle Tram Depot.
Vic Solomons Collection



COTMA

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

PO Box 61, Carlton South, Victoria 3053

www.cotma.org.au

Mal Rowe, Secretary

COTMA conference 2018

The biennial COTMA conference was held in Perth in September. Over 60 attendees participated over five days. We heard from rail and tram professionals and from one another. New Zealand was well represented, and we also had participants from Denmark, Japan and Taiwan, who outlined museum and heritage operations in their countries.

Mark Burgess, Managing Director of the Western Australian Public Transport Authority, and Dave Hinman, President of COTMA, present mementos to our guests Kyoichi Oda of the Asia Pacific Heritage and Tourist Rail Organisation, Japan, Nai-yi Hsu of the Railway Cultural Society Taiwan and Mikael Lund of the Danish Tramway Museum.

The Bill Kingsley Award for outstanding achievement went to Perth Electric Tramway Society for the restoration of E class Perth tramcar No. 66. The judges (Graham Stewart, Dr John Radcliffe and Carolyn Cleak) said, in part: "The final restoration has been achieved with high standard, using as much as possible parts from E type cars. It has resulted in PETS having for the first time a true Perth car that can be used by the visiting public at the museum's operation at Whiteman Park".

The judges also made an Achievement Award for the cooperative work across many years enabling the continued commercial service of Sydney R class tram 1808, now running as Christchurch 1888. The award was shared between the volunteer-based organisations Sydney Tramway Museum as owner of the car, Western Springs Tramway Auckland and Tramway Historical

Society (Christchurch) on behalf of the Heritage Tramways Trust, and Christchurch Tramways Ltd in developing a continued use for the car.

Conference papers and reports covered a wide range of topics, including addresses from senior Perth public transport managers on the Perth rail system, a visit to the Downer-EDI workshop at Nowergup, and rail safety. The conference decided to set up a spare parts management working group whose members will work on projects including logging current parts held by COTMA, developing suggestions on how we share those parts and maintain parts availability for the long term, and liaison with VicTrack over the parts expected to be retained as the trams at Newport are dispersed.

Papers and presentations will be posted on the COTMA website www.cotma.org.au over the next few weeks.

Over 30 people toured the south west corner of Western Australia after the COTMA conference. Highlights included historic Albany, riding the Hotham Valley Railway and even dinner in a former Kalgoorlie and Perth tram!

The next COTMA Conference will be hosted by Bendigo Heritage, in Bendigo, during the third quarter of 2020.

COTMA conference delegates pose in front of Fremantle 29 for the official conference photo in September 2018.

Mal Rowe



BALLARAT

BALLARAT TRAMWAY MUSEUM

PO Box 632, Ballarat, Victoria 3353

www.btm.org.au

Dave Macartney and Warren Doubleday

Victorian Government grant

The Museum has been successful in obtaining a grant from the Victorian Government under its Pick My Project promotion. The grant will go towards the relaying of the track from Depot Junction to Carlton Street, a much-needed operation. The Government's provision of \$200,000 is to be matched by \$250,000 from the Ballarat City Council. A very timely success! While the project application was relatively easy, the trick was to receive the support of the community through votes for your project. Publicity in the *Courier*, social media and requests to members and friends all assisted in the achievement. A great job by all those involved in gathering the necessary support.

Tramway operations

Our Tramcar Showcase event was celebrated on 30 September. This is primarily for tramway enthusiasts, with six former SEC cars operating throughout the day at various times, and all six running in convoy to finish. Almost 300 passengers travelled, while 127 inspected the museum and depot. Twelve crew and other volunteers at the depot enabled the event to run smoothly.

Our annual Night Tram event took place on Wednesday 19 September; the 47th anniversary of the closure of the SEC operated Ballarat tramway system. Some

90 people were carried on the night with lots of photographs taken. Trams 40, the last official SEC passenger carrying tram, and 33 provided the service.

Services ran for the September-October school holidays with good numbers, though the weather was poor during the first week. The October to December period is busy with bookings, Melbourne Cup weekend running, Seniors week trams and many bookings for



Tram 27 rolls down the hill during Showcase day, showing the destination that was the intermediate destination on the Lydiard Street line.

Floyd Bromley

On 2 October 2018, tram 18 had its first run in Wendouree Parade and it had to wait for the swans to cross before proceeding.

Peter Waugh



The Minister for Regional Development Victoria, Jaala Pulford announces Suddenly the successful entries for the Victorian Government Pick My Project initiative at the Ballarat Tramway Museum on 2 October 2018. Alongside is Juliana Addison, the labor candidate for Wendouree.
Peter Waugh

*Top left:
The Mess Room being stripped out on 24 September, exposing some early 1980s timber framing.*
Peter Waugh

The Mess Room being refurbished on 14 October. Gone is the old wall board, fittings, etc., and coming soon is an almost brand new kitchen.
Warren Doubleday

The Big Day Out for the trams and their crews during the Tram Shhowspace Day at St. Aidens Drive, 30 September 2018
Ruth Macchia



The rebuilt roof section in tram No. 12. The side small windows are yet to be installed.

Warren Doubleday



Some of the plastic flowers all sorted and stored ready for the 2019 Begonia Festival when tram 661 will be decorated.

Warren Doubleday



feature the return of a flower tram like those of the late 1930s, using plastic recycled bottle flowers rather than paper ones dipped in wax.

Restoration projects

After four years out of service while its 21E truck was refurbished and the tram repainted, No. 18 moved under its own power again on 18 July. The kickboards were refitted the following week, completing the body work, and attention turned to overhauling the PV3 manual lap brake valves. Some further minor work is being undertaken to make it available for passengers once again.

In early August the body of ESCo No. 12 was lowered to the ground so that work on the roof could proceed at a more comfortable level. The bogie cable tram trucks that it had been sitting on were removed to Bungaree for storage. The interior of the tram is being varnished as well.

During September No. 38's bearings were re-metalled and re-installed in their respective axle boxes. The Westinghouse T1F controllers on No. 26 were refurbished, and now operate crisply as they would have done when new. No. 28's controllers are next!

school groups, Cuthbert 939 and Piper's wedding trams. In all, some 34 bookings were to hand at the start of October.

The manufacture of artificial flowers continues, with thousands now completed in preparation for the Begonia Festival in March 2019. The Festival will

The office/mess room/toilet complex at the depot is in the throes of a complete refurbishment. The wall panelling and other early 1980s installations have gone, and the depot is much as it was in the 1970s, with the most basic of facilities. Let's hope the wait is worth it!

BENDIGO

BENDIGO TRAMWAYS

1 Tramways Avenue, Bendigo, Victoria 3550

www.bendigotramways.com

Dan Rutherford

White Night 1

White Night Melbourne was established to make art and culture accessible to large audiences within public spaces seven years ago, with the 12-hour celebration welcoming about 600,000 people.

The Artistic Director of White Night, David Atkins, said Bendigo was without question one of Victoria's most beautiful and historic cities. White Night Bendigo will celebrate the myths and legends of the city's indigenous owners and its gold rush past. White Night will also recall the visit by composer Richard Strauss and Bendigo's contemporary vibrant arts and cultural community.

White Night Bendigo made its debut on Saturday, 1 September from 7:00pm to 2:00am, when it lit up the city and transformed our streets, laneways, parks and heritage trams into impressive works of art. Thousands of locals and visitors embraced the festival which presented Bendigo's gold rush architecture and public spaces with exhibitions, films, lighting, projection, music and performance.

Our trams ran a 15-minute service from Central Deborah Gold Mine and a 10-minute service from the Joss House from 6:00pm until after 3:00am.

White Night 2

We thank very much all those who helped make White Night a great success. Tourists were, for the most part, very supportive of Bendigo Tramways' involvement in providing transport to the event. In our view, the night ran very smoothly – so much so that the White Night event co-ordinators commented how easily the Bendigo operation ran compared with other cities and locations. We estimate that the trams carried 8,000 passengers on the night.

At this stage there is no confirmation as to whether White Night will be run again in the future. This is a decision for Visit Victoria. However, Bendigo Tramways has demonstrated it is up to the task of providing a practical transport option for this and similar events in the city.

Bendigo Tramways No. 258

Since its return from Auckland, Bendigo Tramways No. 258 has received a minor overhaul to restore its configuration to dual side access. This will enable the car to again be used on the Bendigo network. In Auckland, it had been modified to allow loading on only one side, with the offside doorways being blocked by low walls fitted into the jamb.

The tram was returned to service just in time to join the White Night shuttle services. It has since seen regular use with most crews commenting on how smoothly it runs.

Yarra Trams Nos. 961, 928 and 856

Work on No. 961 has reached phase 7, which involves external painting and installation of external fixtures such as hand rails, bogies and running boards. In the coming weeks, Road 2 will be out of bounds to all except authorised staff to enable static electrical testing to take place.

Progress with car No. 928 is slightly behind No. 961, having reached phase 5. This involves the internal fit-out of timber work and trimming such as hanging straps, wind breaks and seating. Tasks recently completed include initial work relating to the installation of electrical and pneumatic components. This will be followed by the mounting of the larger equipment components and completion of the electrical work.

Currently in Phase 1, car No. 856 is awaiting a roof inspection and structural assessment. This will determine how much rework is required on the tram's frame. Once the scope of the works has been established, restoration will begin with the body receiving any remedial works required following the structural assessment.

BYLANDS

TRAMWAY MUSEUM SOCIETY OF VICTORIA

38 Piccadilly Crescent, Keysborough, Victoria 3173

www.tramwaymuseum.org.au

From *Running Journal*

Society trams at Hawthorn

The Society Board has resolved that all the Society's trams currently on loan to the Victorian Government, including our cable tram set, will be returned to Bylands in the near future. It is pursuing this issue with government officials.

Trams at Newport

Several years ago, the Society was approached by the private owners of several trams then stored at Preston concerning the possibility of these trams being stored at Bylands. Unfortunately this did not progress at the time due to internal issues between those owners and the matter lapsed. Subsequently, the trams were moved to Newport where they were in open storage for several more years, with some parts and fittings being removed during that time.

More recently, Victrack has requested that these trams be removed and a timeframe given. As a result the Society was contacted again and discussions quickly recommenced. In a matter of weeks an agreement was made, and signed with the owner of Adelaide H 368 for the tram to be placed on permanent loan to the Society for possible operation at Bylands in the future. This also now guarantees us a coupled set of Adelaide H type trams. A short time later we were then approached by the owners of W2 650 for possible storage of their

tram. An in-principle agreement has been formulated and once executed, will guarantee a safe home for this vehicle too, whilst earning the Society some welcome revenue for storage costs. It is envisaged that both trams will be moved to Bylands before the end of the year.

The fate of a third tram W2 568 has not yet been decided. It is likely that the tram will be sold to an interested private buyer, and that any useful or surplus parts not required will be made available to the TMSV.

Around the museum

The unseasonably dry winter has not dampened the pace of work around the museum in recent months. Our caretaker Corey Robertson has been busy undertaking various jobs around the site, including installing the flashing around the south end doors of No. 1 shed, and assisting the electrician in restoring power to it, and the lights both internally and externally.

Michael and Tim Fedor continue cleaning up and repairing W3 667 during its period of external storage after 2010. Tim has also done great work on cleaning our exhibits in the Exhibition Shed. A major work day



Inside the revamped Visitor Entrance Centre at Bylands.

William Fedor



Visitors looking at some of our exhibits in No. 2 shed at Bylands.
William Fedor

saw the drainage improved along the eastern driveway and on the path to the Exhibition Shed. New exterior solar lights have been fitted over the doorways of the Visitor Centre and around the toilet block to improve lighting and security.

With the impending arrival of the trams from Newport later this year, a start has been made preparing their storage locations. The H class will be housed initially between Nos. 1 and 2 sheds, with Z class No. 5. A panel of track will be constructed on the western side of the

'crock' shed to store the W2. The owners of each tram are responsible for providing protective covering of their vehicles.

In April this year our eastern neighbour called and requested a replacement boundary fence between our properties. The old fence dated back to the railway days and was badly deteriorated. A new fence was erected over several days in August. Only one short fence on the site's northern boundary now requires replacement, and this is expected to be tackled in the next twelve months.



Adelaide H 368 with W2s 650 and 568 at Newport in June 2018. Cars 368 and 650 will soon be at Bylands.

Michael Fedor

FERNY GROVE

BRISBANE TRAMWAY MUSEUM SOCIETY

PO Box 94, Ferny Hills, Queensland 4055

www.brisbanetramwaymuseum.org

Peter Hyde

Two major events have occupied museum members in recent months. The first was on Saturday 28 July when a gala public open day was held to celebrate the 50th anniversary of the formation of the Museum Society.

The Deputy Mayor, Councillor Adrian Schinner, formally thanked the museum on behalf of the City for its work in preserving the city's transport heritage, and presented a certificate to commemorate the event. The occasion was also used to name Depot No. 1 in memory of Bill Daniels in recognition of his important work in establishing the museum.

Students from Ferny Grove State High School had painted a large mural on the old water tank adjacent to the depot building, and this was formerly unveiled while the school band played for the assembled guests. Members of the band continued to play after the formalities to entertain the visitors. The day was very well attended by the public.

The next event was our annual night operation to mark the anniversary of the fire that destroyed Paddington depot on 28 September 1962.

At 6 o'clock our local member of parliament, the Honourable Mark Furner, officially commissioned the new diode substation. Several trams had been positioned nearby so that, as he operated the switch,



At the anniversary celebration, the Deputy Mayor Cr Adrian Schinner, presented a commemorative certificate from the City Council to the Museum's President Kevin Maizey. Steve Toomey

the lights came on and compressors started, to the accompaniment of applause from the guests.



During the anniversary celebrations the principal depot building was named in honour of the founding President of the Museum the late Bill Daniels. This photo shows his wife Laurelle (a former Museum Secretary) in the centre, Deputy Mayor Cr Adrian Schinner on her left, family members on the left, and various Museum members behind.

Steve Toomey



The old water tank has had its appearance greatly improved by the painting of a large mural by art students from Ferny Grove State High School. This was officially unveiled at the Anniversary Gala Day. These views show (L to R) Museum President Kevin Maizey, Deputy Lord Mayor Cr Adrian Schrinner, Ferny Grove State High School arts students Lyndel Reid, Georgia Osmond and Jack Meehan and art teacher Meegan Barrat. The mural depicts an old tram disappearing into a tunnel, then emerging as the new future of tramways. Steve Toomey



The new rectifier has been undergoing testing since the end of June when the old mercury arc equipment was switched off. Attendance at the event was well down on last year, possibly as a result of the very good attendance by the public a few weeks beforehand.

Restoration works on FM 400, Dreadnought 136 and trolleybus 34 continue, as do all the other activities that are entailed in running a tramway.

Museum members recently constructed a mobile display unit for use at displays at shopping centres and events held away from the museum. On the 50th Anniversary Gala Day it proved useful as an additional ticket sales point at the waiting shelter formerly situated at Stafford. Why is it numbered 378 you may ask? The apron used is from that drop-centre car.

Steve Toomey



HADDON

MELBOURNE TRAMCAR PRESERVATION ASSOCIATION

324 Sago Hill Road, Haddon, Victoria 3351

www.mtpa.com.au

Anthony Smith

September open day

On Sunday 9 September, our second open day for the year was held in mild weather conditions. Whilst visitor numbers were slightly down on the day compared to previous events, those that attended commented favourably on their experience. It was also one of the rare occasions when all our operable trams apart from W2 357 were in traffic.

Restoration of W5 792

During the past three months, the following work has been carried out on this tram.

Four replacement door jambs have been fitted to the cab ends of the saloons. Timbers for the four door jambs were sourced from dismantled trams, with new bottom sections being spliced in to replace the rotted originals.

The side destination box fascias on both sides have been fitted with 'D' mouldings and new glass and square beading has been acquired in readiness for fitting. Replacement blackwood upper bulkhead



W2 407 standing at the upper terminus at Haddon. It has been restored to represent how these trams appeared in their later life. Anthony Smith



L 103 rounding the North-West curve, lower terminus bound. Anthony Smith

Additional support span wires being fitted to the North-West curve overhead.

Daniel Edwards



panels have been cut to size and after preparation, will be installed shortly. New ply inserts for the drop-centre quarter panels have also been fitted.

Work is continuing on the removal of the old colorflek and varnish from the undersides of the ceiling boards and ribs. This is a slow and arduous task that will take time to complete. So far, the No. 1 end saloon has been completed along with the north side ceiling of the drop-centre.

A quotation has been received from an external contractor to prepare and cover the roof boards. We are currently examining funding options with a view of having this work undertaken as a priority project. A start has also been made on preparing the equipment that will be eventually required to return 792 to operation.

In August, an 8-inch brake cylinder was removed from store for overhaul. After the unit was externally degreased and pressure washed, it was dismantled, and all internal components thoroughly washed to remove the old grease and accumulated grime. Following inspection, a light honing of the bore was carried out to remove minor rust after which a new cylinder bucket was fitted, and the cylinder reassembled. The unit is currently undergoing a leakage test.

Overhead

Work has commenced on completing the alignment of the pull off spans on the North-West curve. This has involved the fabrication of additional span work and the transfer of some existing span wires to the extra poles that were installed recently. The alignment of the trolley wire was also adjusted as required. Work is now well advanced on completing the adjustments over this curve.

Storeroom modifications

Modifications have been made to the shelving at the east end of the workshop storeroom to create an additional storage area for parts bins. These bins house our expanding collection of screws and other fastenings, which are currently being sorted according to size and type for easy retrieval.



Frank Schroeders and Anthony Smith reassemble the brake cylinder for 792.
Jacqui Smith



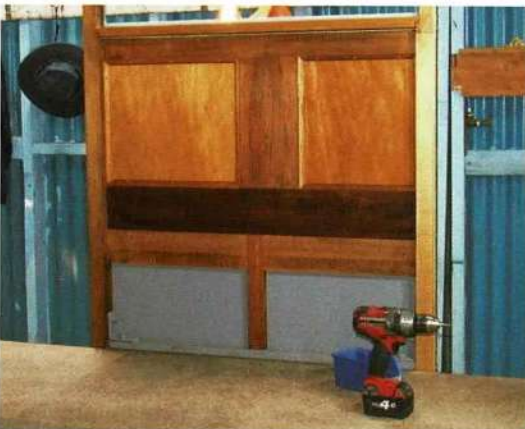
'D' mould trim being fitted to the side destination box fascia of 792.
Anthony Smith



Anthony Smith removing old colorflek from the drop-centre ceiling boards on 792.
Jacqui Smith



New blackwood panel being trial-fitted to the driver's bulkhead of 792.
Jacqui Smith



View showing 792's newly fitted drop-centre quarter panel ply inserts.
Jacqui Smith



Altered shelving arrangement in our main storeroom for nuts, bolts and screw storage.
Anthony Smith

LOFTUS

SOUTH PACIFIC ELECTRIC RAILWAY CO-OP SOCIETY

PO Box 103, Sutherland, NSW 1499

www.sydneytramwaymuseum.com.au

From *SPER News*

Variotram 2107 – preparations

On 28 September three truckloads of Variotram spares were unloaded in the northern yard and three containers were moved onto the strip footings near the previous two.

On 29 September the first stage of a major shunt was carried out to make room for the car. The tower wagon had to be extracted from the back of Road 14 in the top shed as well as half cab bus 1275, also on Road 14. These were taken up to the south shed where there was room on the eastern track. This move involved restacking spare Variotram inverters onto the AI&S flatcar and moving it and some spare bogies out of the way.

One of three truck-loads of Variotram spares arriving at the museum's northern yard on 28 September.

David Critchley



It is 2:29am on 11 October and the truck carrying the Variotram backs along the concreted track north of Pitt Street towards the unloading ramp.

Scott Curnow

At 2.33am the Variotram is ready to be unloaded.

Scott Curnow



Variotram 2107 – arrival

Numerous announced delivery dates for 2107 were postponed due to the haulage contractor having difficulty with obtaining permits from the Roads and Maritime Authority. The Authority was insisting that the move be made via Heathcote Road which would have had the tram arriving at the museum the wrong way around for unloading. As the tram had to be off the Penrith property by the end of September it was loaded onto the trailer there, and then remained in the street for some time.

It set off for Loftus after midnight on Thursday 11 October via the Great Western Highway, M7, M5, Fairford Road, Menai and the Sutherland bypass, arriving about 2:00am. Successive movements saw it reversed onto our double concreted track north of Pitt Street.

Car 2107 was on our rails by 3:04am. It could not be moved until the loading ramp was removed. The time was used to test and power up various systems.

About 7:00am a truck with the special Variotram jacks arrived, and they were unloaded by crane in the northern yard. The crane then loaded the ramp sections.

After the crane operations, the overhead power was restored and 2107 was driven up Tramway Avenue, past Depot Junction and back into the depot yard on the track to the top shed. The car moved into its new home on Road 13 on 20 October.

One side was heavily graffitied whilst stored at Penrith. Most of this should come off when the all-over advertising is peeled off to reveal the original Sydney Light Rail blue livery. It has suffered some water entry due to deteriorated sealing of conduit entry points from the roof mounted equipment.



Unloading has commenced, and the Variotram is moving down the ramp. Martin Pinches



At 10:05am 2107 is on the move under its own power towards the museum. The front windscreen has been cleaned of graffiti. Scott Curnow

2107 sat on the approach road to the top shed for a few days while all the spare parts were cleared from the tram.

Richard Jones



We have a large inventory of spare parts, many of them brand new, which need to be catalogued and properly stored. Some of the spares arrived inside the car when it was delivered. A huge amount of technical data for the car has been obtained.

Apart from a non-operable prototype in Europe it is so far the longest and only preserved operational modern low floor tram. It is our longest tram at 29 metres in five sections, and our only articulated car. It has a stainless-steel frame. It has AC traction motors, lighting and control circuits, and air-conditioning.



A running shed view showing LP class 154, O class 1111 and freight car 24s. Additional pit boards have been placed over the pit in front of 1111 to make it easier to attend to the trolley pole. Scott Curnow

Technically it makes everything else we have look like it is from the stone age.

2018 Transport Heritage grants

The Museum has been successful in obtaining a grant of \$17,034 to restore the Railway Square Waiting Shed that is currently in poor condition. See page 2



The Liverpool Street Signal Box undergoing its refurbishment. Here the roofing iron is being replaced, 18 September 2018.

Michael Hatton

On 19 August the museum commemorated the 70th anniversary of the closure of the Enfield line. Here N 728 showing Mortlake as its destination, moves off to load the first passengers for the day.

Martin Pinches



for more details. The actual cost of the restoration will be substantially more than the grant amount as the Museum has to provide extra funds, and volunteer labour, as our contribution to the project.

The Museum was unfortunately unsuccessful with two other submissions, these being the restoration of R1 2001 to original condition (Stage 1) and to modify our overhead for pantograph operation. With the latter project, the Board has resolved to accept a very reasonable quote from John Holland to undertake this necessary work, which could not be completed in a reasonable time with the limited resources of our overhead team.

Liverpool Street Signal Box

Work continues on this important project with a small team of volunteers. On inspection the original roofing iron was beyond repair and there was no choice but to purchase new roofing iron and ridge capping. A replacement door has been fitted; part of the interior ceiling timber panel has been replaced due to the ingress of water over the years. The interior ceiling has been painted together with the lower interior timber panelling.

The resident signalman, 'Ernie', was beyond repair and a new signalman has been purchased from a mannequin supplier.

Traffic

Perhaps as a result of the release of the film 'Ladies in Black', Sunday 30 September was very busy with capacity loads on some Royal National Park trams. We had limited traffic staff on both Sunday and Monday - a public holiday - due to competing requirements at



Michael Giddey and Ian Saxon inspect the ex-Dockland set of left-hand points in the northern yard.
 Martin Pinches

the Model Railway Exhibition at Liverpool and the Motor Show at Dapto. Thanks are due to the members who responded to the call for help with traffic.

Track and associated work

A new set of left-hand points is being assembled in the northern yard. These are being built in two parts for ease of transport to their future location at the end of the double track just north of the TAFE crossing. Melbourne cast blade units are being used in conjunction with a new cross box. One of the track frogs recovered from Anzac Parade, Kensington, is being reused.

The track panels that the Variotrams were standing on at Penrith have been retrieved and stacked. One

panel was laid beside the Old Substation fence and the replica sprinkler car was placed on it.

On 8 September a second set of left-hand points (from Docklands in Melbourne) was received. These have the cross box, mechanism and steel sleepers intact and are ear-marked for the northern end of Waratah Loop.

Workshop and maintenance

Adelaide H car 358 has been out of service for some time with inverter problems so a trip was made to Canberra to borrow parts from sister car 357. No. 358 is still giving intermittent problems and we are looking at a simpler commercially available inverter to replace the original. It may be possible to repair the units as well as adding more over voltage protection to improve reliability.



Warren Howlett and Terry Thomas preparing a new underframe timber for Melbourne cable trailer 589.
 Martin Pinches

Bill Parkinson cleans a PCC bogie of many years of dirt and grime on 19 September.

Michael Hatton



Melbourne cable trailer 589 entered the workshop on 25 July. It was found that one side had been badly affected by weather exposure prior to its time in Canberra. This side of the car has been dismantled and new framing is being made. A new member is a retired glazier and he is restoring the clerestory windows.

Also on 25 July, **San Francisco PCC 1014** was moved over the pit on Road 10. Some windows have been replaced, doors repaired and rust cut out of some step wells and part of a side panel. The sensitive step panels in the step well at the No. 2 end will be replaced with new step panels as the whole area was badly rusted.

A new fibreglass and steel shell has been fitted to support the original 'Golden Glow' headlight in the No. 1 end apron to replace the sealed beam fitted when the original apron was replaced.

Aluminium castings have been made and machined as new hand rail support flanges. There were some railings missing due to the car being modified for single end operation in the early 1950s. Some railings were obtained from sister car 1007 when it was stored after the end of normal PCC operation.

On 18 August the car was lifted off its trucks and they have been thoroughly cleaned. Servicing of the trucks remains to be completed, and more work on cleaning the underframe will be carried out.

Pushing a bogie back under PCC 1014 on 3 October. The car will be moved to allow a contractor to install LED lights in the workshop.

Martin Pinches



ROCKHAMPTON

ARCHER PARK STATION AND STEAM TRAM MUSEUM

5-87 Denison Street, Rockhampton, Qld 4700 7250 www.qldrailheritage.com/archerpark



The Rockhampton steam tram enters the Archer Park Station after crossing Cambridge Street on 19 August 2018. Archer Park Station Rail Museum is open Sunday to Thursday. The steam tram normally runs on Sundays only excepting in December and January.

Colin Seymour

ST KILDA

AUSTRALIAN ELECTRIC TRANSPORT MUSEUM (SA) INC

PO Box 213, Salisbury, South Australia 5108 www.trammuseumadelaide.com.au

Colin Seymour

Bib & Bub trams

Recent work has focussed on installation of the internal advertising display panels, with sheet metal being used in place of the original timber veneer. It is planned

to install replica World War 2-style advertisements on these panels, with the non-authentic panels being covered with advertisements.



Our new mobility access ramp and platform at the Museum is proving handy for group charters. On Wednesday 26 September 2018 Salisbury Probus Club visited the Museum.

Colin Seymour



Car 14 has been restored with an ivory ceiling to replicate how Bib & Bub trams looked at the time. It is believed that some of the Bib & Bub cars had their ceilings painted ivory or white to cover water damage repairs (i.e. it was easier to paint over water stains with paint rather than varnish). Most of these cars were stabled outside Hackney tram barn during their years of service.

Colin Seymour

The sheet metal advertising panels now installed in car 15 on 26 September 2018.

Colin Seymour



One option being considered for the replica WW2 era advertisements is the use of magnetic backing. A postcard size magnetic tram from our Display Gallery is testing the feasibility of this proposal.

Colin Seymour



W7 1013

On Friday 28 September 2018, a replacement compressor with an overhauled armature was installed and the tram has returned to service. Interestingly, the compressor is a Westinghouse DH20 originally delivered to the MTT in 1952 after cancellation of the planned H1 fleet of cars. After being used for some time for depot air supply, the compressor was given to the Museum by TransAdelaide via the late Ian Seymour.

WHITEMAN PARK

PERTH ELECTRIC TRAMWAY SOCIETY (INC)

PO Box 257, Mount Lawley, Western Australia 6929

www.pets.org.au

Michael Stukely

Annual General Meeting

The Society's thirty-seventh Annual General Meeting was held in the members' room at the Car barn on Sunday, 29 July. The following Office Bearers were elected: President, Allan Kelly; Vice-President, Michael Stukely; Secretary, Robert Pearce; Treasurer, Tony Kelly; Membership Secretary, David Brown; Councillors, Mrs Beth Kelly, Shane Parsons, Roy Winslow. Ray Blackmore was co-opted as a fourth Councillor in August.

In the 12 months to 31 March our four available trams ran a total of 10,526.4km (the 2016-17 total was 9057.6km). The mainstays of the tram fleet were W7 1017 (6446.4km), and W2 329 (2635.2km). There was also significant running by Fremantle 29 (1233.6km) while WAGT (Perth) E 66 ran 211.2km.

A significantly lower number of running days were lost due to fire bans during summer this year, than in 2016-17.

International guests at COTMA Conference

A number of international guests attended the COTMA conference in Perth in September, with several providing presentations. Invitees included Mr Kyoichi Oda from Japan, who represented the Asia Pacific Heritage and Tourist Rail Organisation; Mr

Nai-yi Hsu (who was accompanied by his wife Hsui-Chen) from Taiwan representing the Railway Cultural Society Taiwan; and Mr Mikael Lund from Denmark, who represented The Danish Tramway Museum.

Although he could not attend in person, Tim Borchers, now a resident of Tampa, Florida, USA, gave a live presentation from Florida on the subject of 'Issues and Challenges for Heritage Trams on the Streets'. Tim's presentation highlighted the need for sound maintenance procedures supported by the reliable governance and management of spare parts and repairs. He also emphasised the importance of replacing any failed equipment with parts that are fully certified and technically fit for purpose. The session was a valuable one. The issues raised were especially relevant to COTMA members with operating tramways, namely those in Christchurch, Bendigo and Ballarat. The issues raised in Tim's presentation will be discussed again at the next COTMA conference to be held in Bendigo in 2020.

The organising committee was delighted with the number of international visitors at the Perth conference. It confirmed the growing level of overseas interest in the collections and operations of heritage tramways in Australia and New Zealand.



International visitors receiving the book "Marble Bar to Mandurah" The story of Passenger services in WA from Mark Burgess, Managing Director PTA. From L to R - Mark Burgess, Managing Director PTA; Dave Hinman, COTMA Chairman; Kyoichi Oda, Asia Pacific Heritage and Tourist Rail Organisation, Japan; Nai-yi Hsu, Railway Cultural Society Taiwan, Taiwan; Mikael Lund, the Danish Tramway Museum, Denmark. Mark presented a copy of the book to each of the three overseas visitors at the conference dinner on Sunday evening.

Mal Rowe



Sue (L) and Ardal (R) Nigg were presented with two paintings done by Graham Lees showing the tram in service in Perth streets. Dave Hinman (COTMA Chair) and Bob Pearce (Conference Committee Chair) presented the two paintings during the dinner at Hidden River Estate on Friday September 21st 2018.

Mal Rowe

Traffic operations and service cars

Some fine weekends during winter led to good levels of patronage on the trams, with services running seven days a week as usual in the July school holidays.

However, passenger numbers were generally lower in August. Melbourne W7 1017 was again the main service car for much of the period, with regular backup

With track works and testing completed, on Friday 14 September W2 329 (crewed by Hayden Holmes and Katie Strancar) became the first service car to operate over the upgraded track beyond the Village, through Village Junction Curve and along to the Village Junction Station terminus. Here 329 is returning from the terminus, visible at left, on its first trip of the day.

Michael Stukely



Conference participants spent Monday 17 September visiting various attractions at Whiteman Park. These included the Bus Preservation Society's museum, Revolutions Transport Museum, a special Birds of Prey display and the Print Shop. In this photo, the group arrives on Perth E 66 to visit the Tractor Museum in the Village. With Conference sessions being held in the Motor Museum Conference Room, there was ample time to view the extensive and unique displays there as well.

Michael Stukely





A special 'B' series (3-car) train then carried the group from Nowergup to the northern terminus at Butler, where 'COTMA' was displayed as the destination. This was followed by a non-stop run back through Perth and south to Mandurah. After a short Transperth bus trip to the foreshore, there was a boat tour of the Mandurah canals that included dolphin watching. The return trip to Perth was by regular trains.

Michael Stukely

On Saturday 15 September during the COTMA Conference, a railway tour on the Perth suburban Joondalup and Mandurah lines was enjoyed by participants. Our driver was PETS member, Shane Parsons. A special 'A' series (2-car) electric train was used from Perth (seen here with Shane) to Nowergup EDI Workshop, where the group was shown maintenance operations being carried out. The 'A' series are no longer regularly used on this line.

Michael Stukely



Catching up – a rare trio of Fremantle trams, on 16 July: with FMT 29 temporarily stabled on Road 2 in the Car barn, this is the first time since about 1952 (with the closure of Fremantle's tramways) that these three cars could have been seen together (depending on when their bodies were sold off). The bodies of Nos. 29, and 36 (left) went to Emu Point in Albany, but No. 28 (Road 1, background) went to a farm in the Jarrahdale area in the Perth Hills.

Michael Stukely



The two newly-overhauled and repainted Melbourne No. 15 trucks ready for installation under SW6 891, on Road 4 in the carbarn on 16 June. Adelaide H type 371 is stabled behind them.

Michael Stukely

After its extensive refurbishment, SW6 891 emerges under power from the pit road in the Noel Blackmore Tram Service Centre on 1 August, with Noel Blackmore at the controls.

Lindsay Richardson



provided by W2 329. Perth E 66 ran occasionally during this period.

SW6 891 now only requires final repairs to the door engines, with work towards its recommissioning nearing completion. The tram was driven under power on 1 August following its major refurbishment program, and has successfully completed some track testing.

New level crossing and tramway upgrades

Following the construction of the new level crossing on the new Whiteman Park Fire Escape Link Road at the west end of the Village, and the upgrade to the full Village Junction Curve on the tramway in 2017-18 (see details in *Trolley Wire*, November 2017), all tram services continued to use the temporary tram terminus at the far end of the Village Mall near the Lolly Stop while final adjustments to the overhead were completed, and testing carried out.

In late August, PETS contractors, Allworks, completed a major upgrade on the next section of track on the gradient between the northern end of the Village Junction Curve (beyond the new level crossing) and the platform at Village Junction Station. This involved the installation of 61 steel sleepers to replace all the remaining timber sleepers at this location. Following completion of the trackwork, tram services to Whiteman Village Junction Station tram terminus resumed on 14 September. There is now an excellent ride over all this upgraded track.

Other track and overhead work

The replacement of the remaining timber sleepers on Farmgate Curve with steel sleepers was continued by members of the track team, with the work being completed by 11 August. The next curve to be treated will be the west-to-north curve at Stockmans Crossing.

Overhead line maintenance continued on the west-to-north curve at Stockman's Triangle, which is used by all service trams.



The track team replacing old timber sleepers at the western end of Farmgate Curve in the early morning on 16 June: Nick Tsiaglis attaches the sling to the next timber sleeper for extraction while Roy Winslow and Roy Daley (right) clear out the channels ready for steel sleepers to be inserted, after the timbers had been removed; Trevor Dennhardt is driving the tractor. Michael Stukely

On 14 July, work has progressed to the centre of Farmgate Curve. Nick Tsiaglis (left) clears the remains of a timber sleeper, while Michael Stukely shovel-packs a newly-installed steel sleeper; Terry Young and Trevor Dennhardt are assisting as Roy Daley collects the old timber sleepers with the fork-lift for disposal.

Lindsay Richardson



The Allworks steel sleeper packing machine completing its work on the newly-upgraded track between the previously-upgraded Village Junction Curve and the Village Junction terminus on 30 August.

Michael Stukely



The new PETS carbarn was named the Don & Laurie Tyler Carbarn during the COTMA dinner held there on Monday 17 September. Don Tyler, at right, admires the newly-unveiled sign, with Tony Kelly (PETS Treasurer, left) and Allan Kelly (PETS President). Representatives of Rail heritage WA were also in attendance.

Michael Stukely

Don & Laurie Tyler Carbarn

During the COTMA Conference, a dinner was held in the new carbarn on the evening of Monday 17 September, at which the building was named the Don & Laurie Tyler Carbarn. The carbarn was generously funded by Don Tyler, who attended the dinner. Like his late brother, Laurie, Don is a long-time tram and railway enthusiast. Don was a founding member of the original preservation group that preceded PETS

Looking west over the maintenance pit in the Noel Blackmore Tram Service Centre on 5 September, showing the newly installed safety barrier made and installed by Len Pearce with assistance from the Wednesday team. Also visible are the removable covers over the wider pit sections, beyond and opposite the access staircase at left.

Lindsay Richardson



and was awarded PETS Benefactor Membership. The three-road carbarn will house up to nine bogie trams. Work is in progress for the installation of the track and overhead wiring inside the building, and to establish the necessary connections to the main line.

Good progress has been made by our contractors, MizCo Pty Ltd, on installing the power connections to the new carbarn. Horizontal boring across the carbarn fan area reached the building, and Ray Blackmore reports that it is as complete as it can be for now. We now await the lowering of the water table in the warmer months. The carbarn building's power connection is complete and the lighting is fully operational.

General

Safety improvements have been made around the tram maintenance pit in the Noel Blackmore Tram Service Centre, with the installation of a new safety barrier, and plywood panels to cover the exposed, wider, open areas outside the rails alongside the main pit. The panels are easily removable, to allow full-width pit access as required.

The access road to our site from Workshops Road and the driveway alongside the north side of the Oketon Geddes Carbarn have been resurfaced, and the right-of-way along our present southern fence has been paved with limestone by Park management. Our neighbour, the Bus Preservation Society of WA, has completed the levelling and surfacing of their new fenced vehicle compound on its leased area, immediately outside the PETS western boundary. The removal of some vegetation associated with these works has significantly reduced the fire hazard level around our site.



Melbourne City Circle car 866 waits in Flinders Street to cross Spencer Street and travel past the brilliantly flood-lit Flinders Street Railway Station on .14 September 2018.

Scott Curnow



Following a ride on the Bennett Brook Railway's special train in the afternoon of 17 September 2018, COTMA Conference participants travelled to the Perth Electric Tramway Society's car barn on Fremantle 29, seen here passing through Farmgate Curve.

Michael Stukley