UNDER THE WIRES

$4.50*
*Recommended Retail Price
ISSN 1326-8317

SYDNEY ELECTRIC TRAIN SOCIETY INCORPORATED



Ten Years Since The Last Day
Kiama Electrification Opens
Double Deck Interurbans

FEBRUARY 2002
Volume 12, Number 1



ABOVE: The final weekday of regular eight-car single-deck operations sees C3391, adorned with a home-made "headboard", and set H1 standing in the middle road at Epping. This set had just arrived from Pippita on Friday 10 January 1992 (Glenn Ryan) BELOW: The very last eight-car single-decker to traverse the Sydney System was the Society's first tour on Saturday 11 January 1992. Drivers Leonard Gaut (left) and Alan Ball pose next to C3200 at Cowan prior to the final departure for Hornsby, thence to the Car Sheds and into the pages of history (Roy Howarth)



UNDER THE WIRES

SYDNEY ELECTRIC TRAIN SOCIETY INC.

FEBRUARY 2002 VOLUME 12, NUMBER 1

Editor: ROY L. HOWARTH

Editorial Team:
JOHN CLIFTON, GREG CLUETT

Under The Wires (UTW) is the official newsletter of the Sydney Electric Train Society Incorporated. Opinions expressed in UTW are not necessarily those of the Editor or the committee of the Sydney Electric Train Society Incorporated.

Contributions in the form of articles, photos or slides are always welcome. All written material should be typed or clearly handwritten. Articles can also be submitted by email or on IBM format 3.5" disk, using recognised word processing formats such as Microsoft Word, WordPerfect or Lotus Word Pro. Contributions on disk should also include a printout of the relevant material contained on the disk. The Editor reserves the right to edit articles for spelling, grammar and/or space considerations.

Colour or black & white photographs or slides are welcome. Images can also be sent digitally, in either TIFF or JPEG file formats on CD-ROM. Digital images should have a resolution of not less than approximately 1800x1200 pixels in colour or 8-bit greyscale. All photographs, slides and CD-ROMs will be returned to their owners upon publication. Photographs and images may be held for up to twelve months to fit in with editorial constraints. Photographs submitted for publication may also be used for related publishing and promotional purposes by the Society, credited to the original photographer, unless advice to the contrary is received in writing. Any photographs not returned to their owners will be placed in SETS archives. To assist in publication and return, photographs or media should include the owner's name, dates and captions. You do not have to be a member of SETS to submit material for UTW.

All UTW contributions should be addressed to:

The Editor
Under The Wires
PO Box 275
BROADWAY NSW 2007
or Email: sets@sets.org.au

All other correspondence should be addressed to:

The Secretary
Sydney Electric Train Society Inc.
PO Box 275
BROADWAY NSW 2007

The Editor would like to give special thanks to the following contributors to this issue:

Nicholas Baker, Calvin Cheng, Andrew Coble, John Horne, Malcolm Inglis, John Lovegrove, Maikha Ly, Nathan Lyons, Jacob Macklin, Barry Riley, Jill Roberts, Paul Rogers, Glenn Ryan, Andrew Taylor, Paul Vonwiller and the SETS Committee

FRONT COVER: With the end of the single-deck suburban era imminent, 1940-built Tulloch motor-car C7459 leads set H4 at Boshops on the last single-decker to Elcar on Friday 10 January 1992 (Glenn Ryan)



ABOVE: 8234 & 8244 pass Flemington M.C. with a wheat & container freight, having been diverted from the down goods to the down main. On the right is set V18 led by DJM8127 awaiting its next turn of duty on Saturday 16 January 1999 (Jacob Macklin)

Contents

CommitteeSpeak — 4
Christmas at Goulburn Tour — 6
Workday Progress — 11
Ten Years Since The Last Day — 12
An Interesting Part of Life — 18
Celebrating The Kiama Electrification — 20
Double Deck Interurbans — 22
Under The In-Tray — 29
Inside Back — 31

SETS COMMITTEE 2000/01

PRESIDENT	**ROY L. HOWARTH**
VICE-PRESIDENT	**JOHN CLIFTON**
SECRETARY	**HUGH BURNS**
TREASURER	**LESTER PASLEY**
MEMBERSHIP/MERCHANDISE	**GREG CLUETT**
ACCREDITATION & TRAINING	**EUGENE BASCIUK**
COMMITTEEMAN	**IVAN PLOSKONKA**
GOVT. LIAISON	***DAVID WILSON***
HISTORIAN	***STEPHEN HALGREN***
CURATOR	***JOHN HORNE***

MEMBERSHIP

Membership for the 2001/02 financial year is **$37** (plus **$2** joining fee). If joining between January and April 2002, the membership fee is **$20** (plus **$2** joining fee).

For membership enquiries, please call our Infoline or write to ***The Membership Officer, PO Box 275, Broadway, NSW, 2007***

SETS INFOLINE

(02) 9526 1864

24 HOURS, 7 DAYS

Committee Speak

PRESIDENT
ROY L. HOWARTH

I trust you've had a great festive season and a good start to the new year, despite the recent round of bushfires that ravaged most of the outer-Sydney region.

THE NEW TIMETABLE

It's an interesting coincidence that the tenth anniversary of the January 1992 timetable comes not long before another major timetable change, which will take effect from Sunday 21 April. This new timetable supersedes the January 1992 timetable (and its amendments since then) as it takes into account the expanding patronage of CityRail services in recent years. It also allows for increased dwell time for the lengthy ingress & egress of the double-deckers, which is their one major failing compared to mass-transit stock of other major cities. It's been said that Sydney commuters have been spoilt with the insistence on increased seating capacity (upholstered reversible seating at that!) as opposed to increased standing space which is a feature of mass-transit stock worldwide. The tradition that "Sydney commuters are accustomed to a seat" will be carried on to the new Millennium Trains. This, combined with the continuation of the car-numbering system in use since the 1920's (the Millennium cars will be numbered from D1001 & N1501 onwards) brings to light the saying that "the more things change, the more they stay the same".

STATE MINE POSTSCRIPT

Following our report of the tragic fire at the State Mine Museum in my column in the October issue, the Committee has sent a donation of $200 to go towards their rebuilding efforts. We urge you to consider donating towards their efforts also, for we should be thankful for them allowing us to accommodate 4615 within their Museum. Incidentally, State Mine's official opening will take place on Saturday & Sunday 27/28 April in conjunction with the Lithgow Ironfest, and this will be an occasion not to be missed.

THE AGM AND TIME FOR A CHANGE

Many members would have no doubt wondered when our Annual General Meeting for the 2000/2001 financial year would be held. The AGM was delayed in the main due to changes to the audit process with the use of an external auditor for the first time. This meeting will have already taken place by time you read this.

In the meantime, a change to one of our committee positions has recently taken place. Michael McGinty has advised us that he'll be unable to participate on the committee due to work commitments. Accordingly his position has been declared vacant, and Ivan Ploskonka has been appointed to fill Michael's vacancy, as per section 13(4) of the Society's rules, until the AGM. I would like to thank Michael for his input to the committee over the past year, and wish Ivan well in his tenure on the committee.

Having said all that, this will be my last column in *UTW* as the Society's President. After four years, I have decided not to recontest this position at the forthcoming elections. However, rest assured that I'll be continuing my editorship of *UTW* for the foreseeable future and will continue to lend my assistance to the Society in other capacities.

I would like to wish the next President all the best in steering the Society on the right track, and I urge you to lend your support to the next committee throughout the rest of this year and beyond. I haven't yet decided if my column will continue under its former name of Viewpoint, but, as always, you'll be the first to know.

MEMBERSHIP
GREG CLUETT

The number of current members in SETS has increased by four to 224 members since my last report in the October 2001 issue. Alan Tonks (217) has rejoined as a current member, and we welcome two new members: Allan Stephen (436) of Gladesville, and Rod May (437) of Beverley Hills. A very late 2001/02 renewal was also received.

On a sad note, our member Keith Morris has passed away late in 2001. Keith had been a SETS member since 1996, and he lived at Revesby. Keith was also a long-time member of the RTM and regularly did voluntary work in their Burwood office. The committee wishes to extend their sympathy to Keith's friends and families.

As mentioned in my last report, the new video proceed by Peter Ferguson, ***Red Set Revels 2***, can now be purchased by mail order for $35, plus $5 postage & handling. The running time is 91 minutes. Part One features "Red Sets In Regular Service before Withdrawal"; Part Two features "Rotten Row Roll Call" - cars awaiting disposal; Part Three features "In Search of the Elusive M-sets"; and Part Four features "W-set Finale", which includes the Sesqui Train set W1 and Zoo Train set W2.

If you wish to purchase any of our merchandise, please look up The SETS Shop on our web-site (**www.sets.org.au**) or ring our Infoline (**(02) 9526 1864** to check on current merchandise availability before sending your letter or order form and payment. This will save you unnecessary disappointment.

THE WEB-SITE

JOHN CLIFTON

Our latest Guest Photographer is Barry Riley, who is well known as an outstanding railway photographer. His photos appear regularly in *UTW*. For his debut on the Society's website, Barry presents a selection of images of interurbans, both single & double-deck, and electric locomotives on the Blue Mountains and Main North lines.

A regular feature on the website is a selection of images from the current issue of *UTW* in colour. Both the October and December 2001 issues have recently featured due to the lateness of the October issue. By the time you read this, the colour photos from this issue will be available.

An often-forgotten regular feature in the SETS Library is the SETS Fleet, which contains a restoration report on each of our preserved cars, with detailed progress on restoration works. These reports are frequently updated and provide an up-to-date picture of our cars. If you haven't yet visited this section, you'll be surprised how much has been achieved.

All websites need regular refurbishment to maintain interest and reflect the activities of a dynamic organisation, and ours is no exception. The website will undergo a refurbishment in the near future, and this should be completed by mid-year. NOW is the time to let us have your feedback and your ideas for new features. And of course we always welcome contributions in the form of images, articles or information for the website, and you can email me at ***sets@sets.org.au***

ACCREDITATION

EUGENE BASCIUK

With the ongoing works within the Society, the biggest part of the restoration works is the electricals. I have kept an extensive database on all the electrical works that have been undertaken on the SETS Fleet.

To start with, **CF5003** has had a major inspection of all its electricals that I've documented, and repairs have commenced to make this car operational. Some of the works completed to date involved testing and commissioning of the interior lights, replacing missing parts to the main controls underneath the car (which is continuing), checking all motors and high-tension cables for any damage (these have been found to be intact). However, some of the contactors are missing, and these are being sourced from our stores. **CF5021** has had a major inspection of the electricals, and repairs will start soon. This car has had major damage to its high-tension cables leading to the traction motors, and a bogie swap will be required. All of the contactors are in their correct locations, and these will need to be tested for air-operation. In all, 5021 is in good order except for its traction motors. Some of its interior lights will need to be replaced and tested before commissioning, and the control circuits all look to be intact.

In **TF6010**, some of its interior light sockets have been replaced, tested and recommissioned. This car is almost complete electrically, but the heaters will need to be tested. As for **ETB6037**, some of its missing interior light fittings will need to be replaced and tested before they can be recommissioned. The jumper receptacles will also need to be stripped down and repaired. The major work required for this car is the replacements of the key-flooring and lino in both vestibules. To summarise, these four cars will form part of the Society's first U-boat set as there is not much electrical work required to make them operational.

As for the suburban cars, **C7512** has had a major electrical inspection and part-testing of the high-tension cables. The motor-generator has also been fixed, tested and recommissioned, and the internal lights work off the motor-generator. This car retains its original contactors, which have been tested for air-operation, although some of the contactors need work as they are sticking. Once the contactors are repaired, this car will be close to operational electrically. **C7513** has had a major electrical inspection, and it was found that most of its high-tension cables have been damaged. As mentioned in past reports in UTW, the replacement of this cable has begun, and this is continuing as there is still a lot of work to be done. Most of the contactors look intact, but they need to be checked for air-operation. Further testing is still to be done. In summary, there is still a long way to go, but with a little help, we can shorten this task and get our cars ready to run.

To assist in the restoration process and co-ordinate all works undertaken on our cars, we have created a Maintenance Team. This team is divided into three separate categories, each of which will report to the following supervisors:

*** Electrical Supervisor - Eugene Basciuk**
*** Fitter/Mechanical Supervisor - Greg Oates**
*** Body & Furnishing Supervisor - John Horne**

As Accreditation Officer, I will endeavour to report to the committee, general meetings and in my column and *Workday Progress* in *UTW* to keep all Society members informed of work that has been done.



ABOVE: The newly-cleaned and reglazed exterior of TF6010 at Goulburn Roundhouse during the visit by SETS members on Saturday 9 December 2001, with only the underframe yet to be treated. T4768, which had its concrete floor removed by John Horne and Ben & James Parker during January, is on the right (Andrew Taylor)

Christmas *at* GOULBURN

SATURDAY 9TH DECEMBER 2001

JILL ROBERTS

It was the trip that I'd waited ages for - too see the progress that our dedicated group of members have made with restoring the "U-boats". As with most SETS Tours, the weather was far from ideal, but at least the rain stayed away.

We set off in a Forest Coach Lines bus via Parramatta Road to the M5 thence onto the Hume Highway. Upon arrival in Goulburn it was a short run down the main street past the Railway Station and former goods sheds to the Roundhouse. The Roundhouse is a good mile away from the station and getting there without your own transport is no easy task, so it was all the more reason for a SETS Tour there.

We pulled in directly in front of the sheds where our U-boat cars are stored, where we were met by John Horne and Roy Howarth, who had been working on the cars. After stretching our legs, John & Roy gave us a guided tour of the nine U-boats and four single-deck suburban trailers in the sheds. Amongst the cars we inspected was First Class trailer-car ETB6038. This is currently the working party's accommodation car. This car has original lift-up windows, and was one of the last cars to arrive at Goulburn. Next to 6038 was CF5027, which has Beclawat windows and arrived at Goulburn "via Cranebrook" early in 2001. The next car, CF5022, led the last U-boat set north from Sydney on the Tuesday of the final week of U-boat operations, and was the rear car of the very last U-boat in regular service. Next to 5022 is original-window car 5003, which is the only SETS U-boat motor-car with original lift-up windows and the brown & green interior. Cars CF5003, 5021 and 5022 came to Goulburn with original-window trailer ETB6037 in early 1999. We have been fortunate to have two First class cars, ETB6037 & 6038, one Second class trailer TF6010 and one motor-car CF5003 with original lift-up windows. The one Beclawat-windowed trailer car, TF6006, almost didn't make it to preservation due to a fire that destroyed car CF5028 when both cars were left by the side of the Princes Highway near Heathcote. It was quickly retrieved and taken to Cranebrook to save it from further destruction. The showpiece of the day was TF6010, which was the most recent arrival at Goulburn. This car was positioned outside the shed to show off its newly-cleaned exterior, the result of hard work by our small group of volunteers. It is now cleaner than it was in its last weeks in service, and is an asset to the Society.

All the best things take time to happen, especially restoration of U-boats. Things like removing graffiti and fixing windows and handrails for the U-boat cars may not seem like much to some people, but this and transfer of the cars to Goulburn was no small task, and the cars are starting to look better now than they did in their last days in service.

A BBQ lunch was served after our guided tour, and we enjoyed this in the "Dining Car", which was actually restored 12-wheel composite car MCE573, with tables placed between the seats in the compartments. Thanks to the ladies of the Roundhouse canteen for their superb catering.

Goulburn Roundhouse is, like our Society, small in number of working volunteers, but big on ambition. Within the Roundhouse is an interesting and varied collection of vintage loco-hauled passenger & goods rolling stock, a steam accident crane, steam loco 2419 (currently numbered B390) and three railway pay buses. Also on display was the Roundhouse's own shunter 4821 in tuscan red and candy-stripe 42101, which is owned by SETS member James Gray and currently undergoing a major restoration. Both locos were on display outside the shed and 42101 was started up, much to the appreciation of everyone present.

After a good load of photos, we farewelled Roy, John, James and the Roundhouse and headed for the former Marsden Weir Steam Pumping Station. This was the town water supplier for over 80 years from 1889, when the huge steam-driven engines were installed in the specially-built pumping station at Marsden Weir on the Wollondilly River. The pumping station was superseded in 1972 and replaced by a new pumping station further upstream. The old Waterworks lay idle until the 1980's when a group of enthusiasts were granted permission to restore the huge original steam engines to working order. Today, the area is an attractive family picnic area and tourist attraction.

While we were returning from Goulburn, we were told of a photogenic railway bridge over the Wollondilly River that was part of the long-closed Crookwell branch, which opened on 22 April 1902 and closed for passenger service on 25 August 1985. The line was decommissioned on 18 September 1989. The line is still intact, but very overgrown. We took the bus as close as possible, then walked a short way through the weeds until we came to the lattice bridge.

With time getting short, we reluctantly headed for the motorway and the long drive back home. It was another great day, and one of which I'll have many fond memories for a long time to come! Roll on when the cars are running on tours again - it may be still some way off, but we'll get there.

Thanks to the SETS Committee, the Goulburn Waterworks and especially the dedicated volunteers of Goulburn Roundhouse for their part in organising an excellent tour. *(Additional information courtesy of Paul Vonwiller)*



ABOVE: The Roundhouse's shunter 4821, which was the first 48-class allocated to Goulburn in the 1960's, presents a fine sight on the turntable. This unit has been handy in shunting the electric cars around.
BELOW: The Society's own TF6010 and 42101 (which belongs to James Gray) show off their respective restoration progress in the "bullring". The exterior lettering and logos were removed from 6010 after the visitors departed. The display of 4821, 42101 and 6010 certainly made the Roundhouse a hive of activity - especially when the 421 was fired-up! (Andrew Taylor)



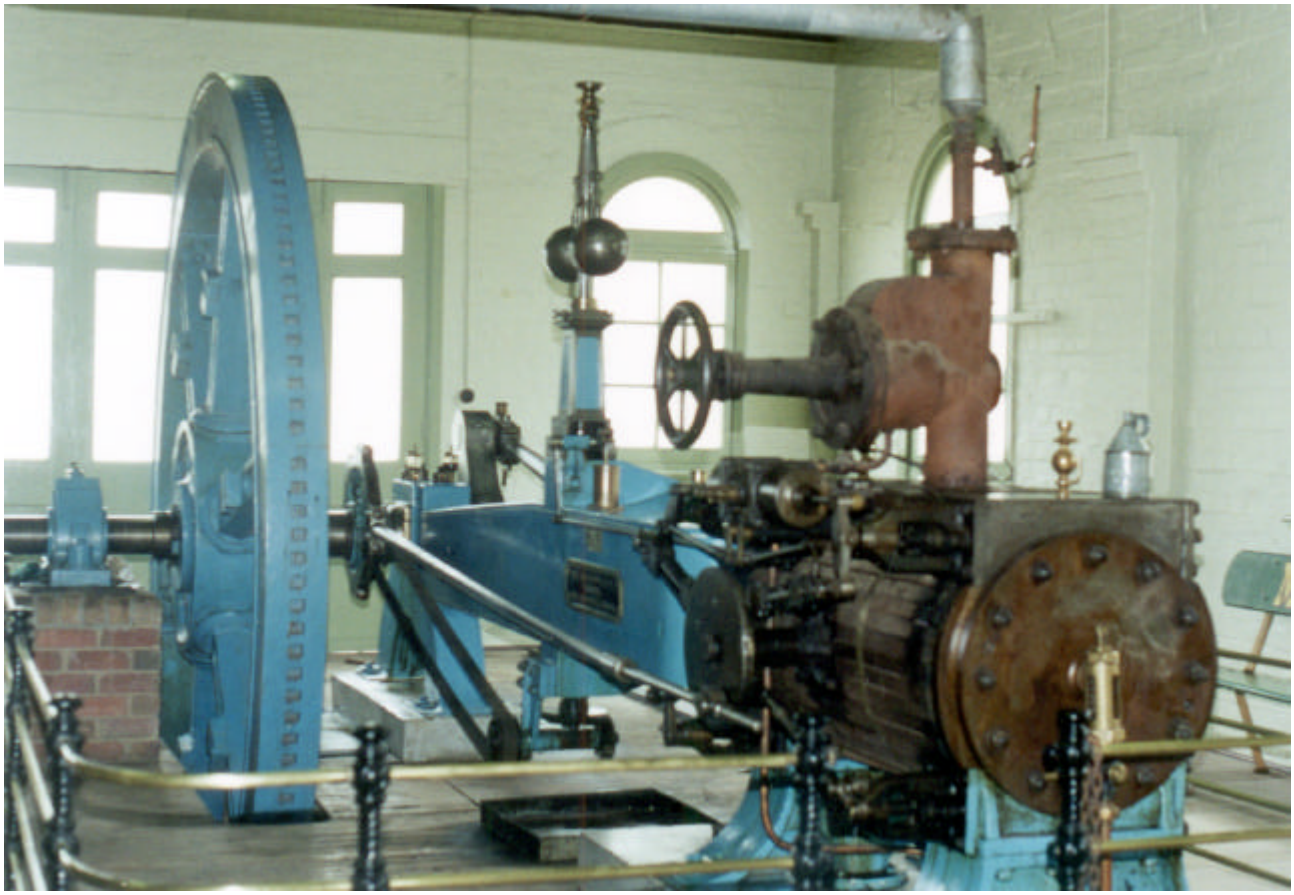


ABOVE: The Roundhouse's shunter 4821 on the turntable, moves partially restored diesel-electric loco 42101 out into the sunlight during the Society's visit. BELOW: Beclawat Uset motor car CF 5021 together with lift up window CF 5003 on adjacent roads (both Andrew Taylor).





ABOVE: The main saloon of ETB6038, which currently doubles as our temporary accommodation car, looking towards the short (former Non Smoking) saloon. The lack of heaters in this section enabled carpet (retrieved from T4609) to be fitted. BELOW: One of the unique steam-engines within the historic Goulburn Waterworks provides a fine example of 19th-century technology and workmanship (both Paul Vonwiller)





THEN & NOW. ABOVE: In years gone by, the historic Goulburn Waterworks formed part of the former Goulburn Steam Museum, which featured, amongst other things, a fully-restored former Sydney D-class tram 102. Some of the narrow-gauge trackwork and a collection of exhibits that formed part of this museum are shown during April 1983. BELOW: Looking in the opposite direction to the photo on the left is Goulburn Waterworks Museum as it appears today, with no trace of the narrow-gauge track that once formed part of the former Steam Museum (Paul Vonwiller)



WORKDAY Progress

OCTOBER 2001 - FEBRUARY 2002

GOULBURN ROUNDHOUSE

The major task performed at Goulburn over January was the removal of the concrete floor from Sputnik trailer-car T4768. This was a massive job which was carried out over the weekend of 12 & 13 January 2002, and Ben and James Parker are to be thanked for their outstanding assistance. A jackhammer was hired for this onerous task and we finished the job late on the Sunday afternoon. Fortunately, there were a few areas around Goulburn Roundhouse which needed the broken-up concrete for road-base, and this saved us a considerable amount of time and money as it avoided having to use the tip. We still have the reinforced rodding to dispose of, and this will be gradually done over the next few months. T4768 also needs a good hose out to ensure that the maximum amount of dust is removed. Some of the floor in 4768 is badly rusted, but this is no surprise. The Sputnik cars were renowned for their bad floors, and even in the 1970's, when the majority of the Sputnik motor-cars received major overhauls, their keyed floors were not replaced whereas the Standard & Tulloch cars received new keyed flooring when they were overhauled.

Other works at Goulburn included more re-glazing on TF6010, including one of its two frosted toilet windows. The installation of this window was a success, and we now have a sufficient quantity of frosted porthole glass cut for the other U-boat cars that are missing them. The rubber-mounting used for these windows is very different to every other type of window we've had to re-glaze, as it's also augmented by aluminium framing. Fortunately the toilet windows that were smashed still have their rubber & aluminium mounting in place which will aid their re-glazing. The job of re-glazing is ongoing, and will dominate our next few work-weekends at Goulburn where a start will be made on fitting some of the non-rubber mounted bulkhead windows on the U-boats, which are probably the worst windows of all to replace.

MEEKS ROAD SUBURBAN CARS

C7512 has had its line-switches overhauled and these will soon be reinstalled. During December, C7513 received a compressor and 7489 had its incomplete compressor replaced. These compressors were delivered to Meeks Road over twelve months ago, and this task would have not been possible without the assistance of the Parkers, as the compressors had to be hand-pushed on a trailer beside the other cars at Meeks Road, jacked and manoeuvred into position. C7465 and 7510 will be similarly treated at Cranebrook and fortunately we will be able to utilise a forklift for these two cars, which will make the task easier.

The two Zoo Train cars, C3714 & 3725, have had Mitsubishi controllers installed. These controllers were reclaimed from U-boat motor-cars which were converted to Mitsubishi controllers. This task was not easy as all cars which were converted to Mitsubishi controllers had this controller sitting on a piece of angle-iron which was bolted to the side wall of the driver's cab, and every car had the bolt-hole in a different position on the angle-iron. To complicate matters further, the U-boat driver's cabs had thinner walls than the Sputnik cars, so the bolts reclaimed from the U-boat cars were not long enough. This meant that new holes had to be drilled (with a large drill kindly lent to us by our friends at the Bus & Truck Museum) and longer bolts were required.

CRANEBROOK

Another 20-foot container was delivered to Cranebrook on Friday 15 February, and this will be filled with generators, compressors etc. Unfortunately, wet weather is currently holding up progress on the packing activities. A program is commencing on replacing the rubber on all the bottom sashes and top hooks on our lift-up windows, and C7465 is the first to be treated. The later windows to be overhauled have new rubbers in these areas, and whilst the majority of the windows for this car have new finger-hooks, some of the rubber is in very poor condition. The poor state of some of these window-rubbers was also highlighted when we opened a number of windows on T4768 for ventilation purposes as we were breaking the concrete floor up. All of the window used for re-glazing TF6010 are being fully treated prior to installation. On Saturday 16 February, a number of window bottom-sashes for C7465 were dismantled, which showed the appalling condition of the rubbers, and by the time you read this, they will have been totally reconstructed. One example of how our reglazing techniques have improved was a recent off-site activity conducted on CF5006, whereby eighteen Beclawat windows were installed in one afternoon. ***John Horne***



ABOVE: Just after sunrise at around 5:00am, Jason Lovegrove gets an early start on the removal of two years' worth of graffiti from TF6010 at Goulburn Roundhouse on 24 November 2001 (John Lovegrove)

Ten years since...

THE LAST DAY

THE SINGLE-DECKER FAREWELL ON 10 JANUARY 1992

GLENN RYAN

Friday 10 January 1992 was a significant day for followers of Sydney's railway scene. A much-publicised CityRail timetable change would see the removal of single-deck suburban electric trains from the Sector 3 northern & western lines and the transfer of the M-sets to Sector 2 lines. With the Friday being the last weekday of the old timetable, an effort was made by both the railfan and CityRail alike to farewell the eight-car single-deck sets. Ten years later, it is fitting to reflect upon those busy final days.

The abolition of the single-deck sets was seen as an achievement by CityRail. The much-publicised new timetable played on the achievement made by withdrawing the manually-operated door single-deck sets and their replacement with Tangara sets. Ironically, the withdrawal of the single-deck fleet overnight left a large hole in CityRail's fleet size that was not immediately filled by Tangara sets, and saw much criticism placed on CityRail when the new timetable floundered with less services.



ABOVE: A few railfans, including the late Bob Potts (centre), at Quakers Hill with set H9, which formed the "Last Riverstone 8-car single-decker" on Friday 10 January 1992 (Glenn Ryan)

As a counter to the withdrawal of the single-deck sets, CityRail celebrated their 65 years of operation by organising a farewell event on the Sydney Harbour Bridge. Four eight-car H-sets were positioned on the Bridge for a couple of minutes on the morning of Friday 10 January, with the invited passengers and politicians taking part in this orchestrated official farewell. The event received extensive coverage on the television news bulletins of that night and in the newspapers on Saturday The single-deck sets still had their rosters to maintain for the remainder of the day, with these runs pinpointed by railfans to provide their own farewells at the destinations that would lose the services of single-deck sets.

The farewell on the Sydney Harbour Bridge had seen around two dozen railfans jostle for position on the western cycleway of the Bridge for their views of the four single-deck sets. After the event, a sense of urgency to ride and photograph the sets descended upon the railfans. Allied to the farewell on the Bridge was the loco-hauling of withdrawn cars from Punchbowl Maintenance Centre to Sydney Yard at around the same time. By the time the railfans had returned to Central from the Bridge, diesel-loco 4895 was noted shunting cars into the Mortuary Sidings in Sydney Yard. The cars off set H22, the first Zoo Train, were amongst these cars, and these would be fondly remembered by SETS members for providing a distraction when walking to SETS meetings in Regent Street during 1992! The afternoon saw a number of railfans head for Western Sydney to ride the last single-deck sets. Set H9 was rostered on the last Riverstone single-deck service. Around one dozen railfans rode in terminal cars C3157 and 3148 as the sun started to drop in the western sky. The set featured a home-made headboard that was re-used from Pippita and Elcar runs during the day.

The last eight-car single-deck set rostered was set H24 on Run 81, 9:53pm ex Hornsby Maintenance Centre. The set was partially decorated, with much vocal acknowledgement given to the public, by the dozen railfans during the journey to Penrith via Nor H24 included four two-motor cars, and consisted of cars C3245, T4583, 4776, C3340, 3446, T4615, 4781 and C3287, with the revelry contained in the lead car of the set, C3245.

Despite the attempts by CityRail to remove the single-deck sets from service and the belief by railfans that the era had ended, the single-deck sets lingered on. SETS would farewell the eight-car single-deck train with their own tour on Saturday 11 January 1992. As a restricted oddity, two four-car H-sets that were used on Carlingford line services would combine to form an eight-car single-deck set that was used on rail employee services to the Chullora Railway Workshops after the January 1992 timetable change. This set was formed exclusively of Tulloch motor-cars and Sputnik trailers. The single-deck and double-deck M and W-sets would linger on in restricted roles on Sector 2.

The W-sets finally ended the use of single-deck suburban cars in revenue passenger services on Saturday 20 November 1993. The concentrated usage of single-deck sets was culled by the January 1992 timetable implementation. Fortunately, individuals and groups such as SETS have assisted in saving members of the single-deck fleet. Unfortunately, we will never be able to re-enact the everyday operations of single-deck sets that were so closely followed by the railfans up until Friday 10 January 1992.

The March 1992 issue of Railway Digest has a sizeable content devoted to the end of the single-deck suburban trains and the events of Friday 10 January 1992. The January/February 1992 edition of UTW also features news on the Society's 11 January 1992 farewell tour as well as further details of the last day, including set consists.

THE HARBOUR BRIDGE FAREWELL RUNS

Run 700a (Set H3 with C3426 as lead car)
0946 Hornsby C/S; Strathfield 1010/1021; Central 1034/1036; Bridge "Nth Pylon" 1042/1046; Milsons Pt 1047/1048; Hornsby C/S 1128

Run 702a
0951 Hornsby C/S; Strathfield 1023/1025; Central 1037/1039; Bridge "Sth Pylon" 1044/1050; Milsons Pt 1052/1053; Hornsby C/S 1134

Run 701a
1008 ex Hornsby C/S; Nth Sydney 1039; Bridge "Sth Pylon" 1042/1046; Central 1052; Strathfield 1105; Hornsby C/S 1127

Run 703a
1011 ex Hornsby C/S; Nth Sydney 1041; Bridge "Nth Pylon" 1044/1050; Central 1056; Strathfield 1110; Hornsby C/S 1132.

Reproduced from STN No.1066, courtesy Glenn Ryan

PERSONAL LAST SINGLE-DECK SUBURBAN JOURNEYS

Thursday 9 January 1992

T4665 - Central to Redfern
C3104 - Redfern to Lidcombe
C3479 - Lidcombe to Granville
C7392 - Granville to Parramatta
C3198 - Parramatta to Lindfield
C3251 - Lindfield to Chatswood
C3391 - Chatswood to Cowan
C7514 - Cowan to Mt Kuring-gai
C3198 - Mt Kuring-gai to Epping

Friday 10 January 1992

C7514 - Pippita to Epping
C3391 - Epping to Nth Sydney C.S.
C7459 - Flemington Car Sheds to Elcar
C3247 - Elcar to Blacktown
C3198 - St Marys to Seven Hills
C3157 - Blacktown to Riverstone
C3148 - Riverstone to Strathfield
C3431 - Strathfield to Hornsby
C3245 - Hornsby to St Marys

Compiled by Glenn Ryan





LEFT: The chalked farewells and the "homemade" headboard taped to the apron of C3245, which heralded the last ever eight-car single-deck suburban set, which formed Run 81 Hornsby Car Sheds to Penrith via North Sydney on the night of Friday 10 January 1992. Another photo of this historic train features in the the May/June 1992 issue of UTW (Glenn Ryan) RIGHT: Just some of the army of railfans, mostly SETS members, who commandeered the lead motor-cars on the single-deck sets. More often than not, the cars concerned were two-motor "Redfern-overhauled" Standard cars. In the No.1 end saloon of C3391 on its way to Cowan via the Shore on Thursday 9 January 1992 are (left to right) Matt Donnelly, Bruce Cook, Peter Bubb, Glenn Ryan, John Bartlett and Robert Carter (Roy Howarth)



THE HARBOUR BRIDGE PROCESSION. ABOVE: On Friday 10 January 1992, C3426 leads set H3 across the "coathanger" during the commemorations that would see four 8-car single-deck sets posed on the Harbour Bridge. BELOW: In recreating a certain famous photo from 1932, one can't help but see the irony in Transport Minister Bruce Baird, SRA Chief Executive Ross Sayers and other officials posing out of the open manual-doors of the cars that they have "retired from service" to prevent ordinary passengers from doing exactly the same thing! (Glenn Ryan)





THE SETS FAREWELL TOUR. ABOVE: A few never-before-published scenes taken before and after the Society's Farewell Tour of Saturday 11 January 1992. C3104 & 7496 shunting in Hornsby Car Sheds yard in the early-morning sun. BELOW: The driver checks the road behind him as C3200 shunts trailer-cars T4772 and 4465 towards the sheds in order to assemble the rest of the special consist (Roy Howarth)





ABOVE: Another scene of motor-cars C7496 & 3104 shunting in Hornsby Car Sheds yard. BELOW: The Farewell Tour reached its conclusion at Hornsby Car Sheds, and with it went over 65 years of suburban electric train history. Greg Antipas removes the headboard from C3200 whilst other Society members complete final unpacking. Other single-deck cars sit in the unwired roads on the left, having turned their last wheels in revenue service (Roy Howarth)





ABOVE: Set H9 is about to form the last-ever eight-car single-deck suburban service from Riverstone on Friday 10 January 1992. BELOW: Elsewhere on the same day, the end is nigh, and the specially-painted cars of the first Zoo Train, set H22, were also put into storage. "Tiger" Sputnik trailer car T4785 heads a long row of cars in the overgrown Mortuary Sidings near Regent Street whilst "red-terror" loco 4895 shunts "zebra" motor-car C3330 in the background. The withdrawal of set H22 led to the painting of a second Zoo Train some months later (Glenn Ryan)



AN INTERESTING PART OF LIFE

Following the demise of the single-deck suburban trains in January 1992, a number of members reminisced about the "good ol' days". To commemorate ten years since the demise of the single-deckers, we provide another insight into times past....

PAUL ROGERS

Having gained permission from CityRail to inspect the stored electric cars at Elston's in January 1992, I approached the site with a mixture of excitement and trepidation. I had in mind the objective of recording as much information as possible while the vehicles still existed. I readily admit that this may have been an idealistic goal, and perhaps I was being rather obsessive. But I realised that this would be the last opportunity for me to gather information of interest and use to both modellers and rail historians alike.

So I darted energetically around the immobilized fleet, determined to jot down details of individual cars. I was thrilled to see so many interesting examples of single-deck suburban electric rolling stock; including C3458 - the first time for many years that I had been able to have a close look at an early-model (1940) Tulloch motor-car still with its original two-motor configuration. I was somewhat depressed by the realisation that this carriage, and indeed the majority of those in the shed, had turned their last wheel in revenue service. They had literally come to the end of the road.

I stepped outside the giant mausoleum into the warm sunshine, reflecting on the situation and accepting the reality and inevitability of change. The visit to Elstons enabled me to relive some interesting moments from yesteryear. The memories of those cars in regular traffic came flooding back, and even included memories of vehicle types scrapped at a much earlier time.

It is now two decades since the withdrawal of the last wooden motor-cars (commonly known as the Bradfield cars). I experienced travelling in these cars on many occasions, and can assure younger readers that the Bradfields did in fact possess unusual motion characteristics! On one journey back in the early 1960's, C3037 provided the means of travelling out to Granville. So enthralled was I by the ability of the ceiling, transverse partitions and side walls of this car to all move in different directions at the same time, that I inadvertently left the train without my tech-drawing folder. I had placed this folder in the small niche between the seat and the side wall of the car. Despite a search of the carriage by railway staff when the train terminated at Fairfield, the folder could not be found. I often wondered if it had been located by the time 3037 was rebuilt to the new body style a couple of years later!

More terrifying was a non-stop trip between Strathfield and Redfern in C3077 during the mid-1960's. On this occasion, the vehicle not only demonstrated the usual Bradfield operational characteristics, but surpassed its brethren in two ways. Firstly, there appeared to be a pronounced "limp" in the motor bogie; this gave the sensation of the car "pivoting" at one corner. Secondly, the movement of the side walls was so volatile at around 80-90 km/h that a traveller might have suspected that Rolf Harris' wobble-board had a large-scale competitor! In any case, everyone seemed to vacate 3077 at Redfern. It was interesting to note that the guard had been riding in the other centre car, which was a late-model Tulloch vehicle! Needless to say, 3077 was also rebuilt to the new body style within a couple of years of this incident, and it gave a much higher standard of comfort when I travelled in it a few years later.

Wooden trailers never seemed to have been plentiful on the North Shore line and out along the Western line to Penrith when I encountered suburban electrics on these routes from the mid-1950's onwards. I suspect that the influx of over 100 additional Tulloch trailers during the 1950's may have banished many of the remaining wooden trailers from the routes mentioned and concentrated their operation elsewhere. However, I do remember travelling in wooden trailers. Their principal points of intrigue for me were the obvious sign of alterations to the ceiling when these cars had been widened for suburban electric operations, the dimly-lit interiors (the result of single incandescent globes along the centre of the ceiling) and, in the case of those with a guard's compartment, the even more dimly-lit "cubby hole" at one end of such carriages. Whenever a guard had a choice between a wooden trailer and another vehicle on the same train, the wooden trailer always seemed to lose out!

There were, however, wooden driving-trailers used on the western line during the first half of the 1960's. These vehicles were usually unrebuilt D4003 and rebuilt 4004, 4007 and 4008. They normally operated on early-morning services to and from Penrith, sometimes in partnership with Parcel vans as well as in the company of the passenger motor-cars which provided their usual method of propulsion. D4003 was of particular interest to me as it seemed to have a perpetual lean towards the driver's side of the car. A slight hint of this lean can be gained from the photograph on page 105 of *First Stop Central.*

At a time when smoking was tolerated on Sydney's suburban electrics, the wooden driving-trailers were usually worked as the non-smoking cars in the two-car sets. The motor-cars (at least on the Western line in the early-1960's) for these sets were normally the Tulloch motor-cars with a large guard's compartment - the so-called "ballroom" cars. Despite being only a few years old at the time, these Tulloch cars were very grubby inside - the result of many patrons being shiftworkers who were heavy smokers. Particularly memorable were the severely discoloured ceilings in the Tulloch cars concerned.

Growing up on Sydney's lower-north shore exposed me from an early age to the single-deck suburban electrics (as well as other "goodies" such as trams across the Sydney Harbour Bridge). After our family moved to Doonside in the outer-western suburbs during 1961, I discovered another interesting facet of electric traction. In those days there were a number of electric loco-hauled service operating on the western line. One of these services was a weekday afternoon Clyde Sidings to Penrith run comprising a 46-class electric locomotive hauling an eight-car LUB end-platform set with a pair of BJ end-platform cars placed at the Sydney end of the consist. This composition always provided an exciting ride, being especially memorable by the lurch experienced as the powerful locomotive lifted the elderly timber-framed carriages from each station stop. The return of the carriages took place as a commuter train during the early peak hour the next weekday morning.

Set VUB76 was one of two end-platform sets upgraded during the inter-war years for western line tourist working. For a brief period in the mid-1960's, it served on a Friday-only late-afternoon Katoomba to Sydney Terminal roster. This train called at all stations west of Blacktown before commencing a speedy run into the city, and again produced an exciting ride mixture of 46-class locomotive and vintage rolling stock.

I somehow retain the idea that the down working of set VUB76 occurred on Thursday evenings. When I rode this set some 35 years after its modification for tourist service, the glamour it may have once had for services such as the "Caves Express" had long since vanished. Indeed, it gave the impression internally that it had received very little maintenance for quite a long time!

Looking back over the years, I can recall many interesting electric traction experiences. I hope that those related in this article will provide some insight into workings of bygone days and inspire us all to record contemporary operations and preserve carriage examples. By these means, future generations might benefit from our interest and our labours.



ABOVE: Tulloch motor-cars C7480 and 3455 awaiting scrapping inside the former Carriage Works (Elston's) during September 1992. Several Tulloch cars contained blue asbestos, which meant that scrapping was the only option (Roy Howarth)



ABOVE: Standard cars (left to right) C3210, 3213, 7423, T4328 are amongst a number of stripped single-deck cars awaiting their inevitable fate outside the former Carriage Works at Eveleigh during July 1992. Former Zoo Train Tulloch motor-car C3468 awaits the scrapper's attention on the right (Roy Howarth)

Celebrating the Kiama Electrification

Saturday 17 November 2001

PAUL VONWILLER

The State Rail Authority officially opened the new electrification works on the South Coast line from Dapto to Kiama on Saturday 17 November 2001. The weather was beautifully clear and sunny throughout the whole day. The commemorative VIP train was four-car intercity set V29, which consisted of cars DKM8145, DIT9191 (the last of the Comeng intercity cars, both built in 1990), DIT9184 and DJM8125. This train had just been repainted for the launch with a new uniform livery of dark blue and golden yellow with the word "Intercity" in white on the driver's ends of the motor-cars, a thin yellow stripe along the underframes and on the sliding doors, large black car numbers and a restyled CityRail logo. This may be a possible future uniform design *(let's hope so! - Ed.)*. This train departed Sydney Terminal at 7:12am from platform 1 for Dapto, ready for the official launch of the newly-electrified line to Kiama. Most of the Society members boarded the 7:44am service, which departed Sydney Terminal from platform 6. This train was four-car AC-traction motor set G7.

On the way to Dapto, the scenery was spectacular as we travelled through the Royal National Park and the bushland forest around Helensburgh and Otford with picturesque ocean views from Stanwell Park to Thirroul. Upon arrival at Wollongong, we travelled through Unanderra to Dapto, where set G7 terminated at 9:28am and we changed over to a four-car Endeavour railcar for the remaining journey to Kiama, which is mostly single-track. This section of the line has some spectacular views of Lake Illawarra and farmland before approaching Albion Park.

Under the electrification project, Albion Park has gained a second platform with the second track, formerly a siding, now in use as a passing loop. Some heritage-style overhead masts have been erected at this station to complement the heritage platform buildings. At Oak Flats, the level crossing next to the station has been replaced by a new road overbridge. Oak Flats will soon be closed and replaced by a new station called Flinders, which will be located further southwards closer to the local residential areas. This new station will feature a bus & rail interchange.

Most of the area around Oak Flats has been urbanised, although some picturesque rural areas can be observed around Dunmore (Shellharbour) and Minnamurra. Recent vegetation growth under the bush regeneration program can been seen near the beachside station at Bombo, which is the closest the Illawarra line comes to the Pacific Ocean. A single-track tunnel pierces the hill south of Bombo before arriving at the picturesque locality of Kiama, which is famous for its Norfolk pines and the blow hole.

The official set V29 arrived at Kiama at 10:15am to break the banner stretched across the line as part of the opening ceremony of the first electric train service. There were numerous locals and other patrons gathered around Kiama Station for the celebrations. Music was provided by the Railway Band and balloons, sausage-sizzles and sample bag handouts were all features of the big day. The Transport Minister's Parliamentary Secretary, Mr Kevin Moss MP, unveiled the plaque with local dignitaries. This was followed by a speech by a member of the local Council of the Illawarra Region. Carl Scully MP and Kevin Moss MP also spoke of the progress that has been made to encourage more train users and the consequent benefit to the environment.

After the opening ceremony, set V29 formed the first official electric service to Wollongong, which departed Kiama at 10:55am, and arrived back at Kiama at 12:50pm. This service was provided for the locals to sample their first ride in an electric trains from Kiama. The new South Coast timetable commenced on 18 November 2001. A number of Dapto services have been extended to Kiama. The new timetable to commence from Sunday 21 April 2002 will see a fully electric service to Kiama. *For further details of the new CityRail timetable, visit* ***www.cityrail.nsw.gov.au***

The new CityRail timetable at a glance...

www.cityrail.nsw.gov.au

** Most South Coast Intercity services extended to Kiama*
** Majority of South Coast services to stop at Wolli Creek*
** Services to stop at Kembla Grange on race days only*
** Trains terminating at East Hills to run via Airport Line*
** Tempe to be serviced by Illawarra/ESR services only*
** "The River" Wyong to St Marys service withdrawn*
** "The Heron" 7:19am Emu Plains to Hornsby withdrawn*
** The two new lines between Turrella & Kingsgrove to be used by Southern Highlands services, Canberra Xplorers and peak hour express services to Campbelltown*
** Direct Bankstown to Blacktown services withdrawn*
** Direct City to Carlingford peak-hour services withdrawn*
** Direct Central to Olympic Park services withdrawn*
** Increase in journey times on most lines from 1 to 6 minutes*



KIAMA GOES ELECTRIC. Set V29 was the star attraction at Kiama as locals mingled with railfans for their first taste of electric train services. After the official speeches were made, several people clamoured to have their pictures taken alongside DKM8145 with its official headboard on Saturday 17 November 2001 (Paul Vonwiller)



The DOUBLE DECK INTERURBANS

THE CHOPPER CARS, FINAL ORDERS & CONCLUSION

JOHN HORNE & ROY HOWARTH

THE FIRST CHOPPER V-SETS
DIM 8069 - 8092
DJM 8093 - 8108
DIT 9115 - 9154

The fourth order of interurbans was for forty motors (**DIM8069 - 8092 and DJM8093 - 8108**) and forty trailers (**DIT9115 - 9154**). The reason for the different codings on the motor-cars was that the last sixteen cars were fitted with chopper-control (as opposed to camshaft-control) equipment. These cars have different hatch covers on the roof and have a distinctive "hum", especially when coasting. All subsequent double-deck interurbans were fitted with chopper-control equipment.

A few of the major differences with this group of cars to previous orders was the painting of the fibreglass driver's front end in a modified version of State Rail's "candy-stripe" livery, additional fog lights on the lower part of the apron and "candy-stripe L7" logos. The interior panelling was yellow instead of dark wood veneer and the upholstery on the seats was orange with chequered yellow fabric inserts, although the last cars of this order (DJM8100 - 8108 & DIT9145 - 9154) did not have the fabric inserts. The seats on these cars were the first to be fitted with handles which standees could hold onto, and made reversing the seats easier.



Set V25, with a chopper-car leading, climbs towards Pennant Hills, having just passed Beecroft station on a down service on Sunday 12 March 1995 (Barry Riley)

During 1990, DJM8101 had its "candy-stripe" front over painted in CityRail blue & yellow plus blue & yellow stripes along the sides (along with two trailers and one other motor-car) to commemorate the 20th anniversary of double-decker interurban services on the Central Coast. In the recent CityDecker overhauls, these cars have had their orange & fabric upholstery replaced with mid-green upholstery similar to the first series V-set cars. The majority of these cars retained their yellow interiors in the process (which is not a perfect match for the green seats), but a few cars have had the yellow overpainted in a pale green which, whilst somewhat austere in appearance, better matches the seats. All motor-cars that received the CityDecker treatment have had the fibreglass front end repainted in yellow & grey. All CityDecker motor & trailer cars received the thin blue and yellow stripes along the underframe (except the 1970 cars) and blue exterior car numbers, and the positioning of the numbers varies between different cars. As mentioned in the previous chapter, DIM8091 has the green upholstery that was originally fitted to Contura car DCT9034. One variation worth noting is that DIM8079 & DIT9125 were the first cars to be fitted with blue Comeng builders plates, whereas all previous cars were fitted with black Comeng plates.

All cars from this order are still in service with the exception of DJM8107, which was scrapped after an altercation with a coal train at Lawson on 21 November 1989.

FOLLOW-ON ORDERS
DJM 8109 - 8138
DIT 9155 - 9184

The fifth order of double-deck interurbans was a follow-on order of thirty cars, being motors **DJM8109 - 8123** and trailers **DIT9155 - 9169**. These cars had the fabric inserts in the seats when new, and the only new feature with this order of cars is that the motor-cars were built with a full-width pilot (or cowcatcher) on the driver's end. Due to coupling problems, this was later changed to a half-width pilot on the off-side only. All cars from this order are still in service.

The sixth order of double-deck interurban cars was another follow-on order of thirty cars, being motors **DJM8124 - 8138** and trailers **DIT9170 - 9184**. When built, these cars were the first interurbans to be fitted with loop-collectors on their Airmate pantographs. This is an arrangement whereby both collectors were joined in a continuous loop at the bottom of the collectors. With pantograph swaps occurring over the years, many earlier cars have received this new type of collector and some cars from this group have received the older type of collectors. The only distinguishing feature of this group of cars was the different hatch covers on the motor-cars, in that they have the chopper-type stainless-steel framing with mesh under the frames. All cars from this group are still in service. The only variation in the "candy-stripe" livery is the different types of "candy L7" logos used on the driver's ends of the motor-cars.

THE FINAL V-SET ORDER
DKM 8139 - 8145
DKT 9185 - 9191

The seventh and final order of double-deck interurbans from Comeng's was for fourteen cars numbered **DKM8139 - 8145** and **DKT9185 - 9191**. These cars differ considerably to all earlier cars, which were almost externally identical to the first double-deck interurbans introduced in 1970. The most obvious difference is the external fluting (patented by Pullman Standard) which is identical to the Goninan suburban cars, rather than the original fluting developed under licence from the Budd Corporation of Philadelphia, USA. These cars have slightly less fluting than all previous cars. The other external differences are the permanent coupling of these cars into motor & trailer pairs and the fitting of single-arm pantographs on the DKM cars when new.

A number of internal modifications in these cars were an improvement on all earlier cars. The seat backs on the reversible seats were totally separated with different handles fitted to all seats; the vestibules are finished in plastic panelling around the toilets, a sliding door (activated by a push-button) is provided between the vestibules and the middle-deck saloons, and there is a continuous passageway between the matching cars as opposed to the end-communication doors and corridor- connectors. For the record, the seats in these cars were unnumbered unlike earlier V-set cars, as the practice of seat reservations on interurban trains ceased in the early- 1980's. When these cars were ordered there was an option for a further thirty-six cars, but unfortunately this option was not taken up. All cars from this order are still in service.



The vestibule sliding door in DKT9186 on 8 July 2001. This door is an improvement on the swing-door layout (Maikha Ly)

CONCLUSION

This series of articles is not comprehensive as there are probably other variations I'm not aware of. I had only lightly mentioned the CityDecker modifications, and it would be appropriate to compile a comprehensive article on the CityDecker modifications once the programme is finished *(any volunteers? - Ed.)*

I hope that you have enjoyed the series on the double-deckers, and I also hope that you can note and appreciate some of the variations that I've mentioned. Given that these cars are still in service, it will be much easier to observe these variations firsthand. I'm certainly interested in what other variations occur during the CityDecker programme, and what variations will occur in future orders of new double-deck cars. I've certainly enjoyed preparing this article, and it's certainly a change from writing an article on an event that has occurred within SETS or a train article that is totally historic because the trains are no longer in regular service and therefore cannot be rebuilt or modified any further. It will be interesting to see how obsolete this article becomes with the modifications that occur to the double-deckers in years to come. I'd like to thank those people who've helped in the preparation of this series of articles, and those who suggested that I prepare it. I hope that you've enjoyed reading it. ***John Horne***

(Editor's Note: We are considering preparing a series of articles on variations within the 46, 85 and 86-class electric locomotives, and would like to hear from anyone willing to come forward with detailed information on this subject. Please contact the editor through the Society's postal address or email me at sets@sets.org.au)





LEFT: Double-deck intercity electric services are now a part of the daily routine in Kiama, with more frequent services to be provided in the 21 April timetable. DJM8104 stands at platform 1 with set V33 on 22 November 2001 (Paul Vonwiller) RIGHT: Electric trains and snow are a rare combination, but such scenes do occur in the upper Blue Mountains during winter. A Chopper-car trails set V19 out of Blackheath on a down Lithgow service (Andrew Coble)



ABOVE: Two contrasting V-set motor-cars at Sydney Terminal on 16 July 2001, of with DJM8132 closest to the camera. DJM8132 features the mesh-grilles, which is a contrast to the early-series motor-car behind it whch has the louvred-steel hatch-covers (Nathan Lyons) BELOW: DJM8125 leads set V37 into Redfern on 14 December 1995. Note the pilot under the driver's off-side and the candy-coloured "L7" logo is the Mark 1 type logo (Malcolm Inglis)





ABOVE: If the interurbans adopted the "single-deck motor & double-deck trailer" consists of the suburban W & M sets, the end result would have looked something like this! CF5035 trails chopper V-set cars DKM8139 and DKT9185 on their way from Gosford on 11 September 1993. These cars were displayed at Gosford to celebrate the opening of that refurbished station. See the September/October 1993 edition of UTW for more photos of this motley consist, which was hauled by Alco unit 4446. Also of interest is the fact that the pantographs on both motor-cars were raised!
BELOW: DJM8099, showing the roof grilles on the first group of chopper cars, and CF5021, now preserved by the Society, at Gosford sidings during 1993 (Roy Howarth)





ABOVE: Set V44, led by a late-series chopper motor-car in the CityRail yellow & grey livery, shunts to Platform 1 at Lithgow on 27 April 2001 (Maikha Ly) BELOW: The interior of DKM8145, the last conventional V-set motor-car to be built, during the Kiama electrification opening celebrations on 17 November 2001. Note the modified seat design, which was originally orange upholstery, but now in V-set mid-green. Unfortunately yellow interiors and green seats, now common to the later group of V-set cars, are not the most aesthetically pleasing combination (Paul Vonwiller)





ABOVE: Whilst the double-deck interurban fleet was delivered over a 19-year period, there are few obvious differences to tell the various batches apart. However, the SRA "candy-stripe" livery, fog lights, high-impact driver's windshield and roof grilles identify the pristine leading car of set V25, shown near the Westmead flyover on 29 December 1988, as part of the later order of chopper-cars (Rod Greenwood) BELOW: A chopper-car leads set V35 into Warrimoo on an up Sydney service. By this stage, these cars still sported their "candy-stripe" fronts but had their original "candy L7" logos replaced with CityRail logos. (Andrew Coble)





ABOVE: V-set special lounge "Contura" car DCT 9034 in the afternnon sun at Newcastle station on SETS Steel City Contura Tour tour on 4th September 1999. This driving trailer is used for special charters and has had its normal seating romoved from the upper deck to have lounges installed and normal seating also removed from the mid level saloons to enable a bar/kitchen area to be built at the number one end. (unknown photographer) BELOW: An eight car blue goose set near Gosford. (Glenn Ryan)





UNDER THE IN-TRAY
PO BOX 275
BROADWAY NSW 2007
or sets@sets.org.au

CAMSHAFT VERSUS CHOPPER V-SETS

Dear Sir,

I write in response to the letter from John Lovegrove published in the February 2001 issue of *Under The Wires.*

Mr Lovegrove's point about jerky V-set operation using mixed car types is essentially correct. This is because of differing response characteristics between camshaft control cars (8021 to 8092) and chopper-control cars (8093 to 8145). When power is applied to a stationary train, the chopper cars apply greater tractive effort than the camshaft cars, causing an uncomfortable start. The quality of the ride can also be affected by the quantity of chopper cars in the consist, their position in the consist and the length of the entire train.

It must be understood that a smooth ride is accomplished when the carriages respond uniformly to the application of power and braking. This can be difficult to achieve if a train contains both camshaft and chopper cars. As an example, a single chopper-car in an eight-car train would be less likely to create an uncomfortable ride if positioned in the middle of the train, than if it is positioned in the rear. In the middle of the train, its extra tractive effort is absorbed by the vehicles marshalled both ahead of it and behind it, and this tends to suppress the extra tractive effort. If the chopper-car is positioned at the rear, all of its additional tractive effort is concentrated to the vehicles ahead of it. Each vehicle is sequentially propelled into the vehicle ahead, and the effect can be felt throughout the train. When moving off, many drivers retain some pressure in the brake cylinders until after power is applied in an effort to cushion the start of the chopper-cars. Unfortunately, the brake cylinder pressure also retards the performance of the camshaft cars, producing little or no improvement, so opinion is divided as to whether the practice carries any operational advantage.

Additional problems occur when power is shut off to allow the train to coast. If the driver needs to shut off power when the train is drawing high motor current, the chopper-car has a different response rate to the camshaft car. Taking the action slowly, this is what happens: when the master controller handle is moved to the "Off" position, the camshaft-control car immediately breaks motoring current which gives the distinctive jerk that most electric-train enthusiasts would be familiar with. At the same time, the chopper-car reduces motoring current gradually to zero and gives no jerk. When the chopper-car is reducing current, it is essentially still powering while the camshaft car has already been shut off one to two seconds earlier. This differential shut-off rate sets up an oscillation in the train consist that can be uncomfortable. Obviously, these oscillations become more severe with longer consists.

The final performance difference occurs when using regenerative braking to bring a train to a complete stop. Let me slow the action down again to explain what happens: when regenerative braking is engaged by the driver, it is applied to the motor-cars with electro-pneumatic (EP) braking applied to the trailers. As speed falls to approximately 23km/h regenerative braking ceases to operate on the camshaft cars because their traction motors can no longer produce (regenerate) enough electricity to act as a braking force. At this point, there is a time lag for a few seconds while EP braking automatically replaces the regenerative braking on these cars. This changeover can sometimes cause some buffeting between the cars. Meanwhile, the chopper-cars have maintained their regenerative braking and will continue to do so down to a speed of approximately 5km/h when the changeover to EP braking takes place. You can see that a train comprised of camshaft-cars will experience the regenerative/EP changeover only once at a speed of approximately 5km/h. However, a mixed consist experiences the changeover (and any potential buffeting) twice.

Concerning the question of whether a concerted effort is made to organise the V-sets to address the above problems, I cannot offer any comment. However, I can suggest that any effort could only be of value in six-car sets because these trains are not subject to marshalling alterations outside Flemington Maintenance Centre. Conversely, the four-car sets are timetabled to amalgamate and divide to form eight or four-car trains, and this presents a logistical barrier to operating trains comprised of similar cars. For example, if you operate a four-car train with chopper-cars, there is no guarantee that the four cars it amalgamates with later in its working day will also be chopper-cars.

I realise this is a lengthy response to a relatively straightforward question. However, I think the information is interesting and of value in answering Mr Lovegrove's questions, and I have tried to explain the subject in layman's terms. However, should any aspect of my comments require further explanation, please write to me at my email address.

u

John Leonard, NSW
johnleonard@ozemail.com.au

NEXT ISSUE

*** ELECTRICS ON THE BINNAWAY BRANCH**
*** MEMORIES OF THE 85 & 86 CLASS**
*** WHITE BAY POWER STATION**



CARS ON PROPERTIES. The 10th anniversary of the demise of the single-deckers wouldn't be complete without a mention of the cars that have found new homes all over the state - in some cases now owned by SETS members! ABOVE: C7428, now resplendent in its green & cream finish, at Mudgee. Note that it retains its original-window driver's cab door (Nicholas Baker) BELOW: An air-conditioned C3183 at Bonnyrigg in Sydney's west (John Horne). After an absence of some years, the series on electric cars on properties will recommence in the near future.



INSIDE BACK...

WHERE DO WE MEET ?

We meet every second month on board the ferry South Steyne, adjacent Pyrmont Bridge, in Darling Harbour.

For details of our next meeting please contact our info-line on (02) 9526 1864 or see our web site at *www.sets.org.au* .

VISITORS WELCOME !

***BACK COVER:** This mid-1980's advertisement for Comeng's double-deck V-sets looks even better in colour! This is the last in our series of period ads for the double-deckers. These ads were important in showing the different types of double-deck cars in the context of the era of their introduction, as opposed to the present-day scene (Courtesy Calvin Cheng)*

Diary Dates

APRIL 2002

April
Sat 6th - Annual General Meeting, Transport Club, 2:30pm
Sat 13th - Maintrain Inspection Tour.
Sat 28th - State Mine Museum Official Opening Day
Details: www.statemine.org.au

If you would like to take part in a Society workday, please call our info-line on 9526 1864.

RED SET REVELS 2

Banish your blues with a good dose of Red!

Available from The SETS Shop & meetings

ORDER ON DVD NOW !

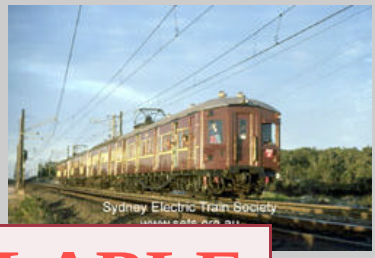
THE SETS SHOP

The following items can be obtained at the meetings, on the tours, or by mail order via the website. Prices for these items are current as as 28 February 2002, and are subject to change without notice. For a comprehensive list of items in our range, visit The SETS Shop at www.sets.org.au

COLOUR FRIDGE MAGNETS







NEW RANGE AVAILABLE






Now serving all of
Newcastle
Sydney
Wollongong



Comeng

Stainless Steel Double Deck Interurban Trains

With electrification of the SRA system to Newcastle & Wollongong now completed, the Comeng Interurban stainless steel double deck trains are providing air conditioned comfort & luxury for "N.S.W." commuters.

It was Comeng design and manufacturing expertise that made this internationally acclaimed passenger car possible and for which it won coveted Awards.

Over more than forty years Comeng have conceived and produced '1st-s' for Australian railway networks and is proud of its reputation as the Nation's leading rolling stock designer, manufacturer and exporter.

Comeng *The Originator*

Comeng
The Rolling Stock Division of The ANI Corporation Limited (Inc. in NSW), 11 Berry Street, Granville, N.S.W. 2142 (P.O. Box 29 Granville, N.S.W. 2142).
(Phone (02) 637 0166 Telex 25282 FAX: (02) 682 5905).