

UNDER THE WIRES

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SYDNEY ELECTRIC TRAIN SOCIETY INCORPORATED

OCTOBER 2002

Volume 12, Number 5





THE SETS 86 CLASS SEND-OFF. ABOVE: Our coverage of the Society's 86-class farewell tour starts with this reminder of the days when 86's were a common sight on various loco-hauled passenger trains. 8646 draws the tour train into platform 3 at Sydney Terminal whilst an 8-car S-set looks on. BELOW: On the way to Kiama, 8646 and cars pause for a photostop at Dapto, the one-time terminus of South Coast electrification. In ideal sunny conditions, many good shots were obtained from the level crossing (Dominik Giemza)



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SYDNEY ELECTRIC TRAIN SOCIETY INC.

OCTOBER 2002 VOLUME 12, NUMBER 5

Editor: ROY L. HOWARTH

Editorial Team:
GREG CLUETT, IVAN PLOSKONKA

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

We wish to thank the following contributors:

Andrew Coble, Chris Downs, Dominik Giemza, John Hourigan, Malcolm Inglis, David Kirkland, Charlie Lewis, Jacob Macklin, Greg Oates, Ivan Ploskonka, Jill Roberts, Glenn Ryan, Andrew Taylor, John Vierkant and the SETS Committee

FRONT COVER: *The electric locomotives of NSW were sent off in style on the Society's Farewell Tour of Saturday 7 September. 8646 performed faultlessly throughout the day, proving that it had a lot of life left in it yet! 8646 awaits departure from Kiama for Olympic Park via the goods lines (Dominik Giemza)*



VALE THE 46's. *For several withdrawn 46-class units, demise meant a lengthy wait for the scrapper's torch at Lithgow. On Saturday 19 November 1994, 4601 is flanked by grounded units 4619 (with "VH. R.I.P." above the centre numbers, referring to the closure of Valley Heights Loco) and 4618, both of which had lost their pantographs and bogies. 4601 is now preserved by the RTM at Valley Heights (Greg Oates)*

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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

CommitteeSpeak

PRESIDENT

JOHN HORNE

The 86-class farewell tour has been and gone, and the tour was an absolutely overwhelming success. Special thanks go to Michael McGinty for coming up with the idea for the tour, Hugh Bums for organising the tour and Lester Pasley and Greg Cluett for all their behind the scenes work with processing the bookings and conducting the raffle on the day. It was a great team effort! Thanks also go to 3801 Limited for providing the carriages. The 3801 Limited officials on the tour were friendly and helpful, which certainly made for a very pleasant tour. Given the success of this tour, our restoration priorities are currently being re-evaluated, and we will keep you up to date on this in future editions of UTW.

The other big event of late was the AMRA October exhibition at Liverpool. Unfortunately, due to other commitments, I was unable to help with this event. However, thanks go to Ivan Ploskonka for organising the rostering, the members who assisted with the setting-up and manning of the stand and the bus crews, in particular David Kirkland, Andrew Haviland and the Parker family. Our stocks of merchandise have diminished, and it is an opportune time to launch another coffee mug, amongst other things.

On a less happier note, I was saddened by the accident at Benalla on Sunday 13 October, which involved Steamrail loco K183, in which three crew members were killed. On behalf of SETS, I would like to extend our deepest sympathies to the families and friends of the crew members, and also to our friends in Steamrail. It should be stressed that Steamrail assisted us in acquiring the pantograph from Hitachi motor-car 201M by lending us a ladder to unbolt the pantograph. The level of co-operation and assistance between the rail museums and the rail authorities in Melbourne makes Sydney look a very poor second.

MEMBERSHIP

GREG CLUETT

We now have 200 current financial members, with only 30 members from the previous financial year yet to renew. Many of these members have promised to renew soon.

On behalf of the committee, we would like to welcome our newest member, Robert French (444) of Darlinghurst. We would also like to welcome back three previously unfinancial members who have recently renewed: Marc Conyard (198) of West Ryde; Colin Grennie (394) of Kendall, NSW and Charlic Lewis (443) of Rydalmere.

I would like to thank the many members who set-up, staffed and dismantled our stand at the Liverpool Model Railway Exhibition on the October long weekend. There were almost too many (rather than too few) volunteers to answer questions, hand out promotional pamphlets and sell merchandise at the stand. That is a pleasing problem for a voluntary group to have! Thanks also to Ivan Ploskonka for his capable work in organising the stand. Merchandise sales this year totalled \$1,576, which was down considerably from last year's total, but so was the attendance at this year's exhibition. In addition, four membership renewals and some tour bookings were received at the stand. A report of the sales break-up at Liverpool will be published later. Three videos were re-released for sale at the exhibition, and the remaining copies can be purchased by mail order or at the meetings.

ACCREDITATION

EUGENE BASCIUK

Hello all once again. I am still writing up the documents to get SETS accredited for main line operations. The documents currently in preparation are the Inspection Procedures Manual and the Risk Management Plan.

The Depot Safety Course is now ready to run, so if you would like to do this course, please contact me and I can schedule dates. By the time you read this, the first Depot Safety Course will have already been conducted, and I will let you know how this went. There will be other courses in the near future, with some of these including the Basic Brakes Course and the Basic Electrical Course. I will advise once these courses are ready, but please note that the prerequisite for both of these courses is the Depot Safety Course. There is now a six month transition period for all SETS workers to do the Depot Safety Course. After this six month period, you will need to do the Depot Safety Course before you can assist us with our works unless you already possess the appropriate qualifications.

On a brighter note, I would like to thank Ian Spring of Glenbrook for his kind donation of inspection manuals. This information is currently helping me to prepare the Inspection Procedures Manual.

This brings me to my last point - as a supervisor of the Maintenance Team, the works program is proceeding slowly, but we need more helpers. The more volunteers that come forward, the quicker our cars can be restored. I know what you're thinking "but I don't have the necessary skills" - WRONG! Everybody has skills, and the skills you have will be useful for various jobs, no matter how big or small. I am not asking that you devote all of your spare time to us, but if you can contribute any amount of time, this will be

be most helpful. Even one hour per month means one more man hours of work is done. If you have any questions, or wish to put your name forward, please call us on (02) 9526 1864, or email us at sets@sets.org.au

VIEWPOINT

ROY HOWARTH

SYDNEY TO MELBOURNE AND WHAT MIGHT HAVE BEEN

At a time when we're contemplating the end of the electric locomotive era in NSW, it's timely to look back two decades ago when electrification was the flavour of the month with governments at all levels and of all persuasions.

With the expansion of the electrified networks in NSW and Victoria, and Brisbane's suburban system soon to follow suit, Federal politicians were also showing interest in electrification on a much larger scale. In December 1979, the Fraser Government announced its grandiose scheme to electrify the Main Southern Line from Campbelltown in NSW to Broadmeadows in Victoria - in other words, electrification from Sydney to Melbourne. This proposal, which was announced a few years after the so-called "energy crisis" of 1974, had a number of ulterior motives. As part of a \$1,100 million infrastructure program to meet an expected development boom in the 1980's, this project was intended to be an electorally popular means of creating jobs without increasing taxes. It would have also lifted demand for power generation in NSW and Victoria and saved at least \$15 million a year (in 1979 dollars) in oil. The Commonwealth offered to pay half of the \$600 million cost, with NSW and Victoria contributing the other half between them. Whilst the Victorian Government was in favour of the project with some reservations, NSW simply was not interested, citing higher priorities such as electrification to Port Kembla and Newcastle.

Unfortunately the logistics, not to mention the funding arrangements for NSW and Victoria, were never completely thought through. For starters, it was unclear as to whether NSW and Victoria would have to repay the Commonwealth's share of the project on top of their own contributions. Furthermore, whether or not the Main South would have also been upgraded to eliminate the steam-age curvature and obsolete infrastructure was never completely ascertained. These issues were enough to give the Wran Government the proverbial 'cold feet', and led to the Federal Government withdrawing its offer of assistance for the project in late-1981. However, Federal funding was later provided for electrification from Waterfall to Port Kembla and Inner Harbour. This funding was initially intended by the Commonwealth to soften opposition from NSW to the Sydney to Melbourne electrification project.

It is always easy to think hypothetically and ponder the current face of the national mainline system had the project proceeded. The impact on freight and passenger operations

is hard to speculate, given that neither state (especially Victoria) had sufficient electric locomotives at the time to provide for Main South traffic as well as their own mainline systems. Whilst the orders for the ten 85-class and fifty 86-class electric locomotives would need to have been doubled to meet the expected demand, this may not have been possible without Federal assistance above their commitment to the electrification project itself.

HOW THE ELECTRIFICATION TIDE HAS TURNED

It now seems like a world away when the trend was to expand the electrified network to reap the benefits of electric-haulage over steam and later diesel traction. This was especially the case over the Great Dividing Range to Lithgow, and it's history now that the success of electrification of the West led to the push to electrify all the way to Newcastle as far back as the 1960's when the C38's still dominated the Newcastle Flyer.

We New South Welshmen can only look on with envy at the success of Queensland's electrified coal (and other major non-urban) lines, and their readiness to embrace the best that electrification technology has to offer. In addition, the success of electrification of the small, but growing, suburban network by TransPerth draws many parallels with the success of Brisbane's electrification programme throughout the 1980's and 1990's.

Unfortunately, changing attitudes to electrified freight haulage, combined with the perceived efficiencies in relying solely on an all-diesel fleet in the age of "user-pays", means that major mainline electrification is very much on the outer. It's certain that electrification wasn't even considered for the Alice Springs to Darwin line. Furthermore, the incomplete and abandoned remnants of the Maldon to Dombarton line are a damning reminder of the willingness of governments to throw our money down the drain for the sake of short-term political expediency. Without the political will to push our legislators for the expansion of the electrified network, Queensland will stand alone as the last bastion of mainline non-passenger and non-urban electrification in this country. This is something every electric enthusiast in NSW should ponder.

U-BOAT EUPHORIA

South Coast footage wanted!

Video footage of single-deck interurbans (U-boats) on the South Coast is required by Peter Ferguson for the next video by Electrak Productions. If you have footage which may be suitable for use, please contact Peter on (02) 9899 1442 or email him at f_peter@hotmail.com. Contributors to this video will receive a free copy as well as a mention in the credits. (Note: Please do not call the SETS Infoline for this matter, but contact Peter direct).

86-class Farewell

SATURDAY 7TH SEPTEMBER 2002

JILL ROBERTS

This was a superb tour in every way! It was a perfect spring day for such an historic occasion. Many of us waited at Platforms 2 & 3 at Sydney Terminal well before 8646 and our train was due. Once it arrived, it was a rapid clicking of cameras before we scrambled for the best seats in the lift-up window cars. Our tour consisted of 3801 Limited's cars HFS 2017, SFN 2182, TBC 532, and "Cockatoo Run" Beclawat-window cars MFS 2137, MBR 2078 (our buffet car) and MFS 2096. I later found out that we weren't the only ones who had requested the services of 3801 Limited that day. Yours truly was one of the lucky ones to get a good seat in SFN2182.

Due to reasons known only to CityRail, we departed Sydney Terminal slightly late, and a delay or two in transit due to trackwork on the Illawarra Main lines meant we were 20 minutes down at Hurstville. An interesting sighting at Illawarra Junction was Freight Australia "Jumbo" unit JL402 on an up ballast train. I barely noticed Como Bridge or Jannali Bank, as electric locos, especially with a light load, make easy work of this 1 in 40 grade. There was a slight signal check outside Sutherland where we picked up more patrons, and headed for our first photostop at Coal Cliff. Almost all of our photostops were in perfect locations with a minimum of sun on the lens, and none with leans or curves away from the platforms. Coal Cliff has always been a popular spot for SETS Tours on the Illawarra due to the Pacific Ocean as the backdrop. We then glided effortlessly down the coast to our next photo location, which was platform 3 at Thirroul. This also gave us a chance to capture set V66 on film, which was led by "Blue Goose" car DIM8043, and trailed by DCM8027. Once V66 was far enough ahead, it was "all aboard" for the sprint to Wollongong. There were at least three G-sets in the yard, along with sets L1 (3763/4005), L2 (3751/4010) and L4 (3755/4007 with 3823 attached).

As well as farewelling the 86-class locos, this part of the tour was one of a number of "firsts", for it was the first time a SETS tour traversed the Inner Harbour balloon loop. We slowly made our way through the coal loader before heading towards our next photostop at Dapto, which was the onetime terminus of South Coast electrification. Many

good photos were obtained from the level-crossing before our next stop at Dunmore-Shellharbour. However, this wasn't a photostop, but purely to cross set V66, now on its return run. Our lunch stop was reached at Kiama, where many patrons watched 8646 run around the train and attach itself to the northern end of the consist. Ben & James Parker then proceeded to relocate the headboard to the head of the train whilst some curious onlookers, waiting for regular CityRail services looked on. After lunch, it was "all stations to Albion Park", with photos at Bombo, Minnumurra, Dunmore, Oak Flats and Albion Park, which received possibly the best upgrade of the newly-electrified stations,



A fine class of locomotive could not have received a better send-off than that by SETS. With its headboard lamenting the end of 50 years of electric locomotion, 8646 awaits departure from Kiama for Olympic Park (Lester Pasley)

complete with full-length concrete down platform. and heritage-style overhead masts. Our next photostop at Wollongong was followed by an enjoyable climb up the coast for our next photo at Scarborough. By now the smoke from the brakes and flange squeals were bringing back fond memories of the time when we sent-off the U-boats in the style they deserved nearly six years ago, and it added to an already great tour.

From Scarborough, we curved and flange-squealed our way through my favourite section of the South Coast line to Helensburgh, with the extreme flange squeals and smoke from the brakes adding to the atmosphere. Helensburgh on the up at that time of day is a great photo location, and I've taken many a photo of the afternoon L-sets and G-sets there. We pulled in a little further up the platform than desired, then our driver reversed about a carriage length in order for us to get the front of 8646, headboard and all, in the photo. At several locations, our driver raised both the pantographs on 8646 for added interest in our photos. We later crossed Como Bridge and were treated to queer looks from passengers waiting for regular Tangara services up until Kogarah for another photostop at a deserted Tempe. While our train stopped at the end of the platform, the steps and footbridge made photography possible.

From Tempe, it was on to the goods lines via Meeks Road, where the Society's Tulloch and Sputnik single-deck motor-cars were stored under tarpaulins. Like Inner Harbour, there was little action at either Enfield or Chullora goods yards with only a few locos sitting near rakes of coal



ABOVE: In the brilliant sunlight that prevailed throughout the day, 8646 and cars await departure from Sydney Terminal, The consist was HFS201 7, SCN2182, TBC532, MFS213 7, MBR20 78 & MFS2145, all of which were once commonly used on 86-class-hauled commuter and mail trains. BELOW: The first photostop at Coal Cliff, where the Pacific Ocean makes a magnificent backdrop (Paul Vonwiller)



hoppers and other freight stock. The yard at Flemington New Markets was as dead as a long out-of-service loco. Only a few years ago, this yard was a hive of activity until its traffic was lost to road trucks.

Olympic Park was our next highlight of the tour. I doubt that an 86-class has ever visited this station prior to our tour, so it was another first for the Society. With no special events on, the station was deserted with only the centre island platform in use. The train pulled up in two location to enable everyone to get a variety of photos of this historic events from different angles. Upon emerging from the Olympic Park line at Flemington, we caught our first taste of loco action for some time, with 8182 & 8011 on an up ballast on the adjacent line. We then proceeded over North Strathfield triangle to our last daylight photostop at Concord West, although the down and bi-directional platforms here don't make for great photos. We subsequently encountered a rare sight as we cruised through Epping. A triple-headed concrete-sleeper train with Northern Rivers locos 42206, 42202 (in the NRR livery) and 42107 (in the faded green & cream Southern Cross livery) was sighted, although there were rumours, confirmed to be true, that Northern Rivers was recently taken over by QR and renamed InterRail.

The sun was setting as we cruised down Cowan bank with the brakes smoking and flanges squealing, and travelling in an N-type car with the windows open and the sun setting between the four Boronia tunnels was a fantastic experience. By the time we reached Hawkesbury River, the sun had set and darkness meant only those with SLR cameras could take time-exposures of this historic event, being an

86-class loco at the head of a set of country cars which were once a common sight in this pretty location. The sleeper train we had sighted at Epping came racing through just as 8646 was running-around our train. With the headboard secured to the front of 8646, we headed up Cowan bank for the firial time, and all too soon we arrived at Homsby. This was followed by quick set-downs at Epping, Concord West and Strathfield, although most of us stayed for that last sprint into Sydney Terminal, where we pulled into platform 2. Upon arrival, 8646 shunted to the buffer stops and ran-around to haul 3801 Limited's cars back to Eveleigh, before returning light-engine to an uncertain future at Enfield.



And so ended half a century of electric locomotives in regular service in New South Wales. I have many recollections of 86's on passenger trains like the Indian Pacific, the short-lived Alice, the Brisbane Limited and Gold Coast MotoRail before they were replaced with XPT's in 1990. Of course, a number of examples of the early electric locos survive in preservation at the Rail Transport Museum at Thirlinere (7100 as a static exhibit & operational 4638), Valley Heights Loco division of the RTM (4601), Dorrigo (4602) Rothbury Riot Railway (4627) and, of course, the

Society's own 4615, which has been preserved in operable condition. It will be interesting to see if any 85 or 86-class locos are eventually preserved.

This had been an excellent tour, and thanks go to those in SETS, Pacific National (formerly FreightCorp) and 3801 Limited for making it possible. It was as good as the time when we farewelled the U-boats back in 1996. When SETS farewells something, we sure do it in the style it deserves!



TOP: 8646 in the midst of shunting manoeuvres south of Kiama station (Dominik Gientza) **LEFT:** One of the first photostops on the Illawarra was at Thirroul, where our train paused to allow a V-set to pass. **RIGHT:** 8646 comes its closest to the Pacific Ocean at the scenic photostop at Bombo. Who would have thought an 86-class would one day be photographed at this popular location? (Greg Oates)



ABOVE: Another perspective of the tour during the photostop at Dapto, this time showing the entire consist, taken from the up platform, on its way to Kiama (Paul Vonwiller) BELOW: With photographers crowding the platform, this view of 8646 at Kiama was obtained just before the loco uncoupled from the cars to run around to the Sydney end of the train. (Greg Oates)





FROM ALBION PARK TO OLYMPIC PARK. ABOVE: One of the numerous photostops to commemorate possibly the first and last visit of an 86-class to Kiama was this stop at Albion Park. Note the 1920's style overhead masts, which were erected to complement the heritage platform buildings (Dominik Gientza) BELOW: Another classic "first and last" occurrence on the tour was this photostop at Olympic Park, where photos of 8646 in these unfamiliar surrounds were obtained from a variety of angles (Lester Pasley)





ABOVE: A brief glimpse of 8646 at Kiama after the loco had run around the train but before the headboard was relocated from the other end (Greg Oates) BELOW: One feature of the tour that stands out is this final visit to Inner Harbour coal loader by an 86-class loco. With patrons getting the best possible view, 8646 and cars gingerly make their way through the coal loading facilities (Dominik Gientza)





THE 86-CLASS FAREWELL... ABOVE: The photostop at Dunmore (Shellharbour) on the return journey from Kiama, showing the distinctive Indian red & cream livery of 3801 Limited's cars. This station also has more of the 1920's styled overhead structures (Andrew Taylor) BELOW: On the return journey from Kiama to Olympic Park, SETS committee members Greg Cluett and Lester Pasley tirelessly went from car to car to conduct the raffle, where they are shown in one of the MFS cars (Greg Oates)





***ABOVE: The sun's rays reflect on the 86-class farewell tour as the train powers through Denistone on the down main, a few minutes behind its scheduled time, as it heads for the final photostop at Hawkesbury River (John Woodland)
BELOW: The "limousine" driver's cab at the Sydney end of 8646 at Kiama, which, for a loco about to be withdrawn from service, was in very good condition. The master controller in on the right of the driver's seat and the brake stand is on the left (Greg Oates)***



THE DEMISE OF THE 86-CLASS ELECTRIC LOCOMOTIVES: **A WASTE OF RESOURCES**

JOHN HORNE

Sunday 30 June 2002 will be remembered as the last time that electric traction was used for the haulage of freight trains in NSW for the foreseeable future. Emotional railfan issues aside, the withdrawal of the 86-class electric locomotives represents the end of a modern type of locomotive that still had many years of good service remaining, especially had they been used efficiently, which unfortunately they were denied.

So why did it happen, and what could have been done to keep electrically-hauled freight trains alive and kicking? I can see the problem going back as far as the late-1980's. In the early to mid-1980's, the 86-class electrics were delivered and the majority of the 46-class received major overhauls. The lines to Newcastle, Wollongong and Port Kembla were electrified and electric traction was used to haul freight trains to Newcastle and the coal trains to Port Kembla. The changing of locomotives at Broadmeadow rather than Gosford was certainly an improvement in efficiency at the time, and fitted in well with the limit of operation of Delec-based crews to Broadmeadow, Lithgow, Port Kembla and Goulburn. Generally, when crews operated to Lithgow, Broadmeadow and Goulburn, it was a book-off job or they would ride home passenger, especially from Broadmeadow or Lithgow, given the number of passenger trains from these two locations.

The electric haulage of coal from the Lithgow area to Port Kembla was good in theory, but unfortunately with the steep grades and the number of other train movements in the suburban area on the Illawarra Line there were electric current supply capacity problems, when electric locos were operated in multiple unit, especially on Como Bank and the climb out of Loftus. Apart from these problems, the coal trains required an additional two locomotives for the trip from Enfield to Waterfall and therefore additional crews. To improve the situation, new substations were built at Rockdale, Como and between Loflus & Engadine. These substations assisted the trains, but there were still current

problems, and the additional locomotives were still required. In later years, four locomotives were used for the entire trip to save on crewing costs.

As a long-term solution, a new line was to have been constructed between Maldon and Dombarton and a second line was proposed between St Marys and Glenlee. These lines would have bypassed the grades of the Illawarra line and avoided the conflict of competing with suburban & intercity passenger trains. There were proposals to electrify the Maldon to Dombarton line with 25,000 volts a.c., al-

though the steel stanchions constructed between Unanderra and Dombarton are designed for 1,500 volts d.c.. It is well known that construction commenced on this line in the mid-1980's, but following the election of the Greiner Coalition government in 1988, construction was abruptly stopped, despite promises made by the Coalition to complete this line whilst they were in Opposition. Whilst the present State Government promised to recommence construction of this line whilst they were the Opposition, nothing has happened. The changeover

point for a.c. would have been on the flat between Coniston and Unanderra. Meanwhile, the line has been electrified to Dapto, and now Kiania at 1,500 volts d.c., so if the Maldon to Dombarton line was ever built, it would have to be d.c. as the line is climbing even next to Unanderra station, and changeover points need to be on level sections.

Meanwhile, in 1987, trials commenced with having Delec-based crews operating to Junee and a second crew taking the trains to Melbourne. This represented a major improvement in efficiency with only two crews required on freight trains between Sydney and Melbourne and this was the forerunner to the operation of the NR freight trains. Obviously, this practice was also under consideration on the Sydney to Brisbane corridor. In 1987, overhauls of 46-class electric locomotives ceased with 4623 and 4629 being the last locomotives despatched from Cardiff and 4621 despatched from Valley Heights. 4639 was sent to Valley



In a scene that can no longer be repeated, 8630, 8628, & 8611 head three consists of Freight Rail blue 86s stabled 'on the air' at Rozelle Yard during 1995 (Ivan Ploskonka)

Heights as a gesture to keep Valley Heights Loco going, but this facility was subsequently closed by the-then Coalition government in 1989, and so the overhaul of 4639 was finished elsewhere. So why didn't 4619, 4631 to 4636 and 4640 receive major overhauls? Was it part of an agenda that goes back to 1987 to end electric haulage of freight trains between Sydney and Broadmeadow? If this was the case, I have no problems with the ending of electric haulage of the Sydney to Brisbane freights as far as Broadmeadow, as there would have been considerable savings in crewing and other costs without needing to change locomotives and crews at Broadmeadow. Similar points could be made about these sorts of changes at Lithgow on the west.

So what should have been done? The savings in the through running of trains should have been costed (which I have no doubt was done), and these savings should have been quarantined and reinvested in electrifying some of the coal lines so that electric locomotives, especially the 86-class could still be utilised. The first line that could have been electrified would have been Lithgow to Baal Bone Colliery. Other lines could have included Picton to Tahmoor (and possibly even recommencement of the Maldon to Dombarton line), and some of the collieries in the Hunter region. These savings would have been ongoing, so that construction would have also been ongoing. A benefit would have been the electrification of some of the passenger services (such as to Picton and Maitland), so it would have been a win-win situation. It is still not too late to do this, but once the 85 & 86-class locos are cut-up, then it will be too late. I accept that the sale of FreightCorp (along with National Rail) has made this more difficult, but where's the political will? Let's do it, and let's do it now!!

[With a State Election less than six months away, readers are encouraged to write letters raising the above issues to State Members of Parliament of all persuasions, the media and other channels as individuals. However, please consult the Committee first if you intend writing any correspondence on behalf of the Society - Editor]



ABOVE: In their last year as candy-stripe units, 8648, 8629 & 8637 thunder through Asquith on a northbound freight during November 1994 (Greg Oates)



ABOVE: One of the eight 46-class units not to receive a heavy overhaul in the 1980's was 4631. This unit retained the original three-porthole configuration, along with the Stone headlights, up to its demise. Stripped of pantographs and with several windows smashed, 4631 will shortly end its days grounded on the "Lawn Cemetery" at Lithgow Maintenance Centre (John Hourigan)



LEFT: 8644, 8625 and another 86 are stabled at Welders platform, Chullora on Wednesday 22 May 1996. For the record, the wooden station building at Welders was only recently demolished (Glenn Ryan) RIGHT: Quad units 8607/46/47 & 27 descend the Blue Mountains between Hazelbrook and Woodford on a Clarence to Inner Harbour coalie on Thursday 9 August 2001. Note that, for once, the Great Western Highway is unusually quiet! (Chris Downs)





THE CLASS LEADERS. ABOVE: Clearly displaying its illuminated 'E' above the number box, 8501 awaits its turn on the wheel lathe at Delec on Monday 14 July 1997 (Glenn Ryan) **BELOW:** FreightRail blue 8601 amongst its candy-stripe siblings at ACDEP for washing during 1992. The consist of 8645/01/42/47 & 16 (with pantograph up) had been towed dead by 42220. 8642 was the last 86-class unit to be repainted in candy-stripe, and it was the only unit in this livery to receive the small cabside FreightRail logos in addition to the SRA 'L7' logos (Greg Oates)





ABOVE: The electric locos were often the dirtiest on the system during the State Rail years. This was due to copper fallout from the overhead making their paint finish almost invisible! Measures to rectify this see 8614/21/46 & 39 outside ACDEP after their wash on 28 September 1993 (Greg Oates) BELOW: In 1989, 8602 received an experimental version of the FreightRail blue scheme that became known as the "stealth" livery. This unit leads candy-stripe 8649 and 4495 dead-attached on 5282 up freight through Gosford Yard on Thursday 8 November 1990 (John Hourigan)





ABOVE: On one of the most scenic lines in the state, 8605 & 8627 speed through Wondabyne as they head southwards with an up interstate freight during October 1989. BELOW: One of the most prestigious jobs of the 86's was hauling the Indian Pacific to Lithgow. Long before AN's CLP units took over, 8620 & 8646 power through Redfern platform 2 with WE4 during April 1985. Note that the overhead booking office was halfway through its refurbishment at that time (Greg Oates)



Colour Schemes of the 46-class Electrics

DAVID KIRKLAND & ROY HOWARTH

With a life-span of nearly four decades under four different rail authorities (NSWGR, Public Transport Commission, State Rail Authority and finally FreightRail), it was inevitable that, of the three classes of electric units in NSW, the 46-class units would undergo the most number of changes of livery over the years. This is in contrast to the 85 & 86-class electrics, which only received one change of livery during their relatively short careers (with the exception of Bicentennial units 8604 & 8619).

When the 46-class units were received from Britain, their livery was Midland red (maroon) with a crimson red band, thinly edged in cream, along the midsection of the sides and ends and numbers above the buffers. Within a few years the Midland red areas were repainted into Tuscan red (arguably a different shade of Tuscan from that carried on other NSWGR diesels). In 1967, this livery was changed to conventional Tuscan red (and later Indian red) with two yellow whiskers on each end and one yellow stripe along the sides. All forty units were repainted in this livery by the early 1970's. The numbers on each end were relocated to directly underneath the cab windscreens between the handrails.

On entering service, the 46's received a coat of arms plate and chrome side numbers identical to the brass cabside numbers used on NSWGR steam locos. The first few had these numbers applied direct to the sides, but all the others had these numbers applied to a raised plate. The chrome numbers were later removed from the majority of the 46's, with some Tuscan units receiving painted yellow numbers.

In the late 1970's, 4604 was repainted at Elcar Workshops, where it received one thick yellow whisker at each end (instead of the normal two), no yellow stripe along the sides, and larger yellow numbers located in the centre of the loco. It also received white 'L7' logos. 4605 was also repainted at Elcar, but with double whiskers at each end and standard-sized side numbers. A few other 46's also received white 'L7' logos, whereas 4623 once carried the PTC blue 'L7' in a white square.

In 1979, the reverse livery was introduced and four 46's carried their own version of this livery, which consisted of a thick yellow band running along the sides and ending in thick Indian red stripes at each end. As this was by no means an aesthetically attractive livery, these four units became known as the "Flying Custards". This abortive attempt at a change of livery was superseded by State Rail's attractive candy-stripe livery in 1982. The standard candy stripe livery featured a yellow 'L7' logo, although some

units had a white logo. Unfortunately, like the 86's, the 46-class units often became very dirty and many 46's only had the last two digits of their end numbers cleaned. One unit, 4639, which was one of the first of the 46's painted candy-stripe, had the dubious honour of carrying the unsightly 'Red Terror' scheme, which was all-over red with a single white band along the bottom of the body, with white numbers & logos.

The final change in livery was the well-known FreightRail blue livery, which was introduced in 1990. The main variation of this livery on the 46's was the white and yellow on each end, which formed a vortex around the headlights due to the lack of a painted surface on the buffer beams. Like the balance of the locomotive fleet, large white numerals and small FreightRail logos were standard across the 46's that carried this livery.

The disposition of the various liveries to the 46-class electrics can be summarised as:

REVERSE (*Flying Custards*): 4606, 4614, 4626, 4635

CANDY-STRIPE: 4607, 4608, 4609, 4610, 4611, 4612, 4613, 4614, 4615, 4616, 4617, 4618, 4621, 4623, 4624, 4625, 4626, 4627, 4628, 4629, 4630, 4635, 4636, 4637, 4638, 4639, 4640.

RED TERROR: 4639.

FREIGHT-RAIL BLUE: 4606, 4607, 4612, 4615, 4624, 4627, 4630.

FINAL LIVERY OF EACH UNIT UPON WITHDRAWAL FROM SERVICE

4601 IR	4602 IR	4603 IR	4604 IR	4605 IR	4606 FB
4607 FB	4608 CS	4609 CS	4610 CS	4611 CS	4612 FB
4613 CS	4614 CS	4615 FB	4616 CS	4617 CS	4618 CS
4619 IR	4620 IR	4621 CS	4622 IR	4623 CS	4624 FB
4625 CS	4626 CS	4627 FB	4628 CS	4629 CS	4630 FB
4631 IR	4632 IR	4633 IR	4634 IR	4635 CS	4636 CS
4637 CS	4638 CS	4639 RT	4640 CS		

IR Indian Red; CS Candy-Stripe; RT Red Terror; FB FreightRail Blue.

(Readers are referred to the August 1998 issue of UTW for the scrapping dates of the non-preserved 46-class units)



*ABOVE: Tuscan-red 4616 greets newly-repainted AN loco GM2 whilst the latter is being resanded at Eveleigh Loco in 1983. GM's 1 & 2 were in Sydney for an Australian National Indian Pacific promotional tour (Greg Oates)
BELOW: Dirty candy-stripe units 4621 & 4638 with 4493 dead-attached on a down wheat in Broadmeadow Yard on Tuesday 14 January 1992. 44237 is on the right. Given the operating environment at the time, the candy livery do not prove to be a practical paint scheme for the electric locomotives, as it needed too regular cleaning (John Hourigan)*





ABOVE: Freshly-painted 4609 stabled at Chullora with an 86-class unit and another candy-stripe 46-class during 1989. The light grey roofs and white upper cab ends of this livery tended to show the dirt. It's a pity that the candy-stripe 46's didn't stay this clean for long! (Photographer unknown) BELOW: Two forms of electric traction that are sadly no longer a part of the everyday scene at Hornsby. A grimy 4608 on an up freight passes C7435 during 1991 (Andrew Haviland)





THE LESS POPULAR LIVERIES. ABOVE: Four 46-class units carried their own version of the reverse livery, and they quickly became known as the 'Flying Custards'. One such unit, 4614, awaits departure from Broadmeadow on a down Newcastle Flyer service in 1987 (Greg Oates) BELOW: One of the first units to be painted candy-stripe, 4639, was later to make history as the only 46-class to be painted in the rather plain 'Red Terror' livery. 4639 leads blue 4606 and a candy unit on a down freight near Bell (Andrew Coble)



A South African Rail Safari

JOHN VIERKANT

In April this year I was fortunate enough to be able to visit South Africa. Many varied opinions are held of this beautiful country, but only some of them are true, so I went to see for myself. Under the escort of my attractive local guide - whose local knowledge was very handy, we caught an electric train service from Cape Town for Simonstown. She chose this route due to the excellent coastal scenery.

After leaving the inner suburbs, the train essentially followed the coastline. The railway noticeably deviated around mountains, rather than tunnelling through them. The trains themselves were, naturally enough, of Dutch design. Those who have seen Dutch trains will recognize instantly the similar manner in which they are painted, and also the high backed seating! My observations that they sounded not unlike a Sydney W-set, were confirmed after technical discussions with SETS member Mr. G. Nowland who has visited South Africa in the past. Driver's windows had weld-mesh across them as unfortunately, night services are often subject to vandals' projectiles including bricks and concrete pieces. Graffiti was also evident. The track was standard gauge and of concrete and steel sleeper construction to prevent termite damage.

A high presence of security on the train was noticeable. Guards moved quickly to different carriages at random, to make their presence felt. They also checked tickets, although there were no 'inspectors' as such on this trip. Although I didn't notice at first, there appears still to be different classes of rail ticket, as the first four carriages were standing room only & full of native Africans, whereas the last carriage in which we rode was all but empty (the train was 8 carriages long). The return trip cost about 8 Rand (\$A1.40).

Platform and Station architecture had a noticeably British influence as do many of Sydney's stations. Examples include weatherboard construction, reverse bullnose roofing and wooden pedestrian overbridge construction.

Several differences were also noted, including the presence of barbed-wire fencing; the high level of station lighting, and the absence of obvious closed-circuit television surveillance, although I am sure there were cameras. One station, Kalk Bai (White Bay) had a pub on the platform. The idea of a beer just before your train would no doubt agree with some SETS members I bet!

Just like Sydney, not everything goes to plan. Our train waited 15 minutes outside one station without explanation, and then abruptly terminated at Vishoek (Fish Corner). The



The line to Simonstown follows the 'scenic route' including the distinctive St James viaduct. The Metrorail livery is yellow & grey diagonal stripes (John Vierkant)

time was marching on, so rather than a bus trip to Simonstown, we decided to return to Capetown. Since returning to Australia, people have asked me did I feel safe in South Africa. The only times I felt unsafe were in Cape Town station due to the gang elements loitering about, being "followed" by a lion in the Shamwari Game Reserve later that week, and driving at night in Johannesburg.

The other rail journey we were fortunate enough to take was the morning

Outiniqua Choo Tjoe train between the coastal towns of George and Knysna. For the princely sum of 60 Rand (\$A10), we travelled behind a diesel engine for three hours of winding through the Outiniqua Mountain range. The highlights of this "must do" trip were the famous George River viaduct (the only place I ran out of film, which was a shame), winding through the pine forests, looping around the swamplands in the shape of a giant U, and coming into Knysna across the water. There is also a steam hauled train, but it normally operates on the afternoon shift, subject to fire restrictions.

I will comment that there are also trains in Johannesburg. Unfortunately, due to limited time and ignorance of the network, we did not have the opportunity to "gunzel" any further.

I enjoyed my holiday in South Africa. Anyone with any questions on my experience is welcome to drop me an email at alcomania@hotmail.com



ABOVE: The train for Simonstown that terminated at Vishoek (Fish Corner), with its impressive backdrop, on Thursday 4 April 2002. John decided not to catch the bus to Simonstown as this train was running quite late, so he caught the same set back to Cape Town. BELOW: Two Metrorail EMU sets stabled in the barbed-wire compound at Vishoek awaiting their next turn of duty, also on 4 April 2002. Note the cage over the driver's window, the ever-present graffiti and the cowcatchers underneath the buffing plates (John Vierkant)



THE MILLENNIUM TRAIN

Close-up

CHARLIE LEWIS

The Millennium Trains, targetted as the M-sets, are interesting trains. Since they came into regular service following the official celebrations at the end of June, I have travelled with the first of the series, set M1, to nearly all parts of the Sydney Metropolitan system, including Glenfield (via Granville both ways), East Hills (via the City Circle and the Airport line both ways), most of the western line stations between Parramatta and Kingswood, although I have yet to film the train at Werrington, Penrith, Emu Plains and Harris Park. I have also filmed the train crossing the Sydney Harbour Bridge in both directions, along with most of the North Shore line, plus Asquith, Mount Kuring-gai and Berowra, crossing the Meadowbank Bridge and the Cronulla branch.

I have had the opportunity at least twice to travel up front with the drivers, technical crew of EDI Rail and SRA inspectors between Strathfield and Homsby. The view from the driver's compartment is very interesting, with the computerised speedo clearly showing the speed the train is travelling, as well as the displaying the interiors of the four cars on six different surveillance camera monitors to ensure that the travelling public was enjoying the journey on the Millennium Train in safety.

Whilst the reversible seats are a bit hard, the windows are much easier to see through compared to the those on the Tangara. The riding comfort is very smooth, and you can't hear the noise of the bogies when crossing from one set of points to another. The public address system (controlled, along with the electronic indicators by GPS) needs adjusting as, most of the time, there were no announcements

by the pre-recorded voice. It can be very hard to hear the guard's announcements as well. On a few occasions, set M1 has had a few technical problems and had to cut short its regular off-peak runs at various locations, especially at Homsby on more than one occasion.

I have been invited by EDI Rail to inspect the four M-sets at Eveleigh Maintenance Centre on more than once occasion. During my inspection there, I noticed that sets M1 & M4 were coupled together with a lot of sandbags in each of the eight cars. This is to compare the load tonnage of a full train of passengers. I had an interesting look behind the scenes of one of the M-sets, where I saw many of the wiring compartments, as well as an opportunity to walk underneath the length of set M3.

I intend to also film the additional M-sets on their delivery runs from Cardiff to Eveleigh via the North Shore, as well as their trial runs on the Newcastle suburban network between Cardiff and Newcastle. My views of the new suburban train are that it's very impressive. The ride is smooth both upstairs and downstairs. Overall, I would give the new trains a score of approximately 99.5 out of a total of 100. It still needs a few minor touch-ups with the electrical and computer components. However, it is a very good looking train, an interesting riding experience, and yes, it has been a long time coming.

My special thanks to the drivers, technical crew at EDI Rail including, plus the various CityRail guards and SRA inspectors, and to Scott Ferris of SRA Train Planning for the regular updates via fax of the M-sets' movements.



LEFT: Over the past few months, the Millennium Trains have travelled far and wide to make their presence known. D1001 awaits departure from Emu Plains on a Berowra via Nth Sydney service on 1 August 2002. RIGHT: Seven days later, D1004 trails set M2 out of Sutherland on a Waterfall service. The destination on 1004 is already set for the return journey to Bondi Junction (Malcolm Inglis)



THE START OF THE TANGARA ERA. With the introduction of the Millennium Train, it's time we looked back to the days when the Tangaras were introduced to the Sydney system for the first time. In these views taken during November 1988, D6105 leads pristine set T3 (brown target) through Sydney Yard toward Eveleigh. These early sets entered service with candy-stripe logos and stripes. Within a few of years the Tangaras would no longer be seen with the elderly country rolling-stock that had been part of Sydney Yard for as long anyone could be remember. (Greg Oates)



INSIDE BACK...

THE SETS SHOP

IN PREPARATION...

is open!

TRACTION ACTION REVISITED ON DVD

The uncut version of the first video from Electrak Productions. Includes cab rides and instructions on driving C3102 by Pat "Lightning" Lyden. Relive the days of the early SETS single-deck tours as many of our members will remember them! 82 minutes \$30.00*

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Scenes of single-deck H-sets in various locations between 1990-92 prior to their withdrawal from service, plus some glimpses of Bradfield motor-cars in revenue service. 62 minutes. \$30.00*

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Single-deckers in their dying days in revenue service, including Tulloch double-deck W & M set trailers and the Sesqui and Zoo Trains. 91 minutes. \$30.00*

*Add \$5 postage & handling if ordering by mail. Our merchandise is on sale at our meetings, on the tours or by mail order at www.sets.org.au

WYNYARD INDICATOR PANELS FOR SALE

The Society has a number of indicator panels from Wynyard Station for sale. There are only a limited number of small concourse panels (some with digital clocks) and various large-sized panels from Platforms 3, 5 & 6. The concourse panels were installed in 1984, whilst the large panels were installed in 1973. The current prices are \$45 for the small concourse panels, and \$50 for the large-sized panels. Interested buyers should quote their particular stations and/or railway lines when ordering.

CONDITIONS: All panels are to be sold as is. Buyers should make their own arrangements for the transport of these panels.

For any queries or to place an order, please call the SETS Infoline on (02) 9526 1864.

BACK COVER - THE COLOURFUL 86'S. TOP: We close our tribute to the 86-class electric with two of the attractive liveries adorned by the 86-class electric during their heyday in the 1980's. TOP: 8619 was one of two electric units to carry the Bicentennial livery, the other being 8604. A freshly painted 8619 stands in the Mortuary Sidings near Central on 19 August 1988. BOTTOM: In near-new condition, the state's only tri-bo unit, 8650, awaits departure from platform 8 at Sydney Terminal with NE-49 to Gosford in 1987. Another 86-class can be glimpsed in the background (Greg Oates)



HITACHI PANTOGRAPH COMES TO SYDNEY, PART 2. LEFT: Withdrawn Hitachi motor-car 201M awaiting the scrapper's torch at the rear of Newport Workshops on Saturday 25 May 2002, prior to the retrieval of the pantograph by SETS. **RIGHT:** After its long journey from Melbourne, the Metro-Vick pantograph from 201M arrives at Cranebrook on Saturday 28 June 2002 on the back of John Horne's trailer (John Horne)



**FAREWELL TO THE 86-CLASS
ELECTRICS, 1983 - 2002**

