

Modern Rollingstock – Is It Worth Preserving ?

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Introduction

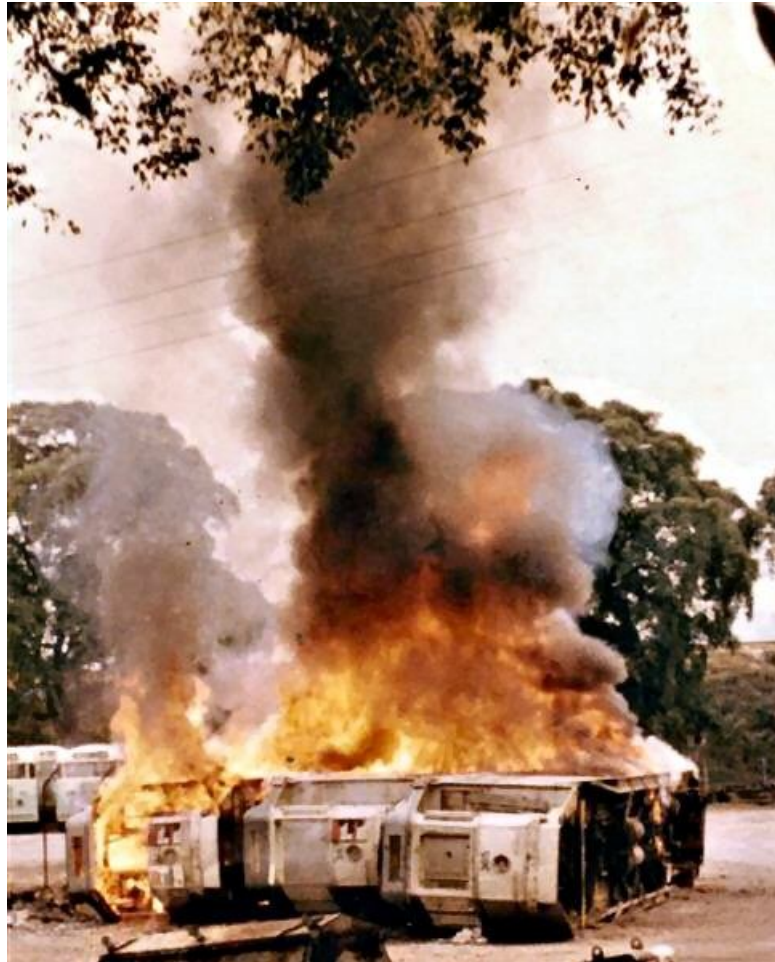
By way of an introduction let's cast our minds back 50 to 60 years ago. Whilst I know it is difficult for some today to comprehend including myself, but what was happening way back then?



All around Australia and New Zealand the pattern was the same lives were changing, our favourite, well known and loved trams were disappearing.

Travel methods had come down to relying on either those smelly diesel powered or to a lesser extent the almost acceptable trolley buses.

All around trams were being scrapped and many faced the ultimate indignity of being stripped and burnt.



Tracks were being torn up and in some cases overhead cut down.

To many this meant concern and profound change in their lives.

Like minded people started to band together concerned about the wanton destruction they were witnessing.

Amongst these individual groups the conversation was nearly always the same what could be done to keep all of the trams from being scrapped?

The idea was then hit upon let's go out and preserve some of the trams for our enjoyment and in some cases for future generations to see and admire.

Preserving trams statically was of course not the best way of experiencing them, or in deed of preserving them for future generations. They needed to be operated at museums.

So off we all went and our museums and thus preservation began in earnest.



Gradually we acquired the trams and infrastructure to make our dreams turn into reality.



In the intervening period since preservation began modern trams have entered service in Melbourne, Adelaide and a new line opened in Sydney. We of course in a few years are going to see trams operate on the Gold Coast.

Modern rollingstock or in our case trams, unlike the previous generation are generally only designed to last 30 years, receive a minor overhaul at about 15 years of age and then scrapped.

We are fast approaching the end of the life span of some modern trams and shortly scrapping will begin. In the case of Melbourne it has already happened with the Z class trams.

As museums are we going to preserve examples of these trams for future generations to see and perhaps ride on?

The purpose of this paper is to explore some of the issues that as museums we must think about if modern trams are to be preserved or operated.

Why Bother?

Just as what was said when perhaps the late Alf Twentyman purchased a Melbourne cable car set for preservation and we all questioned when preserving our initial electric trams why bother?

Are we just a museum that is only going to preserve trams of the later 19th and 20th century or are we going to be a group focussed on the preservation of particular cities trams?

After all we were young once and young people today only have seen and ridden modern trams in those cities that have them operating. Is it a way of getting younger people involved in the running of our museums?

When you think about it no one under about 25 would know what a tram conductor did, nor would they have ever seen them at work. For that matter it would be the case they would not have ridden a once common Melbourne W2 class tram in revenue service.

The Challenges

Modern trams require different infrastructure and skills in their maintenance and operation. Some of the issues include;

Traction Power Requirements

Modern trams are by any means big hungry beasts and need up to 3 or 4 times more current for normal operation than our older trams and in many cases operate on a nominal voltage of 750 volts.

They are very voltage sensitive for example modern B class trams in Melbourne will not work at voltages below 470 volts. Compare this to a W class tram that can operate at voltages as low as 300 volts.

Modern trams of course have pantographs. Will your museum's overhead be able to operate or be modified to operate pantographs?

Does your museum have a power supply big enough to cope with this?

Axle Loads & Wheel Profile – Effect on Tracks

Today's trams have much greater axle loads, they are up to double that required for older.

For example modern trams can require up to 10 tons per axle.

They also in many cases have different wheel profiles and flange depths up to 18 mm.

Is your museum track constructed and maintained to a standard that it will not have the rails spreading or the tram derailing every time a modern tram accelerates?

Spare Parts

Modern trams require a huge array of components that will at some stage fail.

To operate this type of tram the spare parts requirements are huge.

Most of the parts are specialised and you cannot simply go down to your local hardware and buy replacement parts, neither in many cases can be easily made.

These parts also only have a short life as technology marches on

Mixed Operation

In modern street operation the use of old and new trams presents challenges.

Driving techniques are different between each type of modern rollingstock and never virtually uniform as is the case with older trams.

Modern trams also accelerate much faster than older trams and greater vigilance is needed when driving them.

Rail Safety

We are all familiar with the onerous conditions that we have to fulfil the requirements for rail safety.

The current requirements place a huge load on those involved in compliance and operation of our trams.

Be assured the requirements would be larger and more stringent.

Vehicle Maintenance

Modern trams require more routine and specialised maintenance.

Does your museum have the skill base and equipment to perform the maintenance requirements.

An example of this is the tram acceleration rate which must be carefully and regularly adjusted to ensure the wheels do not slip.

Conclusion

Well having gone through some of the issues with the preservation of modern trams and their operation I must say that even I must admit it is a real challenge.

The challenge is before us all but should we rise to this challenge?

Each museum must make its own mind up, however I personally believe that not too at least attempt to preserve some modern trams in operation would be regretful.

The best form of tram preservation is when they are operational.

Just as the older trams were a part of our lives and we all rose to the challenge of preserving them we should at least have a go preserving modern tram operational.

We can only succeed or at worst have them on static display.

I also believe that the preservation and operation of modern trams by our museums continues to make us relevant to today's and in deed tomorrow's generation.

Naturally not every museum is set up or inclined to operate modern trams, however with careful thought and preparation it can be done.

The time to do this thought and preparation is now and not leave things until it is too late.

They say history repeats its self well this is a similar situation when we first set out to preserve our older trams.

