

Navy Crew Cars

Lynn Zelmer

Every Queensland sugar mill tramway (railway) was and is unique. Even when infrastructure, motive power and rolling stock is built to common standards, individual mill requirements - and changes due to on-going maintenance and repairs - cause equipment to quickly deviate from the 'as new' standard.

This uniqueness is even more apparent with mill-constructed equipment, and is what makes the sugar cane railways most intriguing for me. This article, featuring wagons known as navy crew cars, is the first of several that will look at navy equipment and its modelling potential.

Most of the equipment in the photos accompanying this article was built when navy crews required transport to and from work sites. Health and safety standards, particularly for transporting crews, were lower then than they are today. However, they did provide transport and protection from the extremes (heat and rain) of Queensland weather.

I'm a freelance modeller, and my cane railway has some characteristics of a shire tramway. This allows me to build wagons that intrigue me, whilst following plausible mill practice. Since the Fiji cane railways also generally followed Australian practice, I can include models of Fijian equipment also.

Navy wagons offer lots of scope for the modeller, particularly if you have a good supply of cane bin underframes and are willing to estimate dimensions. Locally constructed wagons are often built on old wholestick trucks, cane bin underframes, and old flat wagons. Timber wagons were likely built by mill workers or local carpenters, while metal construction can sometimes indicate a commercially built vehicle.

Older equipment often used a combination of timber and corrugated iron sheeting. Modern crew cars are more likely to use plywood, pressed steel, aluminium or fibreglass and may even be self-propelled. The basic construction will be quite straightforward for most modellers, the difficulty will more likely be ensuring a credible interior.



ABOVE: This Pleystowe Mill crew car was photographed at North Eton Mill, 21 Aug 2000. What appears to be a metal winch frame on the near end indicates it was likely built from an ex-wholestick truck. Greg Stephenson, photographer.



BELOW: A basic crew car, perhaps using a commercial garden shed, on an ex-cane bin underframe or the equivalent. Mossman Mill, Mowbray area (8 Oct 1994). Greg Stephenson, photographer.

RIGHT: Two Farleigh Mill navy wagons obviously built on ex-cane bin underframes (18 Oct 1997). Both appear to be constructed of square steel tubing with pressed steel sheeting and a narrow corrugation metal roof. The far wagon likely has a single door on the other side and would be used for hauling tools and work materials. The nearer 'toast rack' crew car has tool boxes under the seats as well as a centre table. For a model the most difficult tasks would likely be simulating the pressed steel ridges and spot welding marks. Greg Stephenson, photographer.





ABOVE: Today's health and safety regulations wouldn't allow you to ride on this Fairymead Mill navy wagon, photographed in 1981. It transported navy tools and materials, and provided shelter from the elements. For modelling purposes the length of the flat car is not important, although it should be remembered that most mill and shire equipment was relatively short. Greg Stephenson, photographer.



ABOVE: Navy wagons at Marian Mill; 13 Aug 1986. The wagons on the left are for carrying tools and other materials to a work site. The crew car on the right, whether self-propelled or loco hauled, provides transport to the work site, shelter from the elements and serves as a lunchroom. Greg Stephenson, photographer.

Modelling Navy Crew Cars

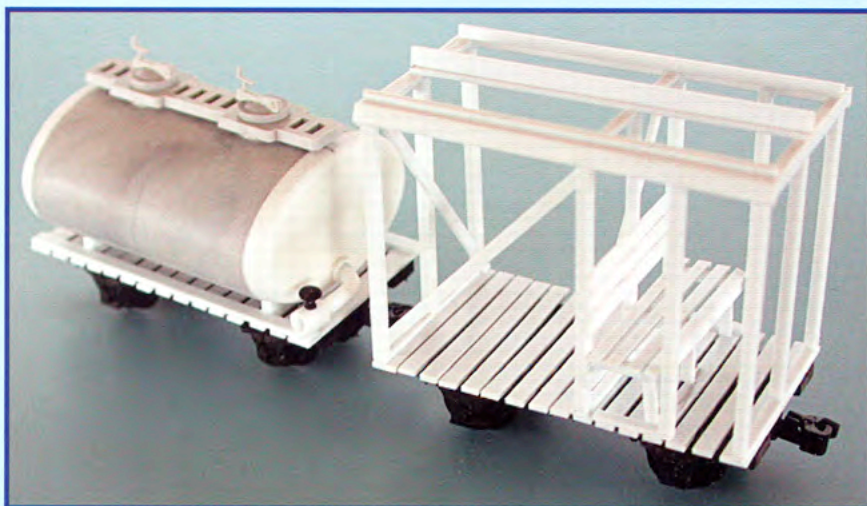
The HOn30 Crew Car

I'm essentially a 'lazy' modeller and am quite willing to let someone else do the hard work, especially in the smaller scales. As a result, most of my HOn30 wagons were built on a commercial wagon chassis such as Peco's wood-type solebar kit (NR-123). In HO this chassis scales out to roughly 10' 3" in length with a 6' 6" wheelbase, and readily accepts the N gauge couplers I use for all my HOn30 stock.

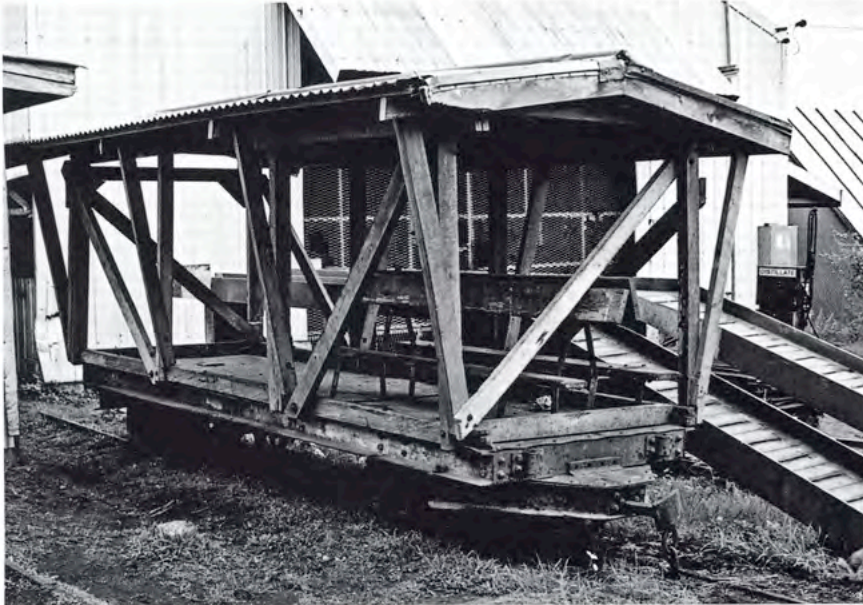
Cane trains use engine brakes only, thus the first step was to remove the cast-on brake gear and buffers, followed by building a styrene superstructure. A personal background in building construction, and a collection of styrene dimension lumber, helps with constructing wagons such as this. It was built like an iron clad, timber framed, shed on the wagon chassis. Incidentally, the molasses tanker was kitbashed using half a tank from an OO scale lorry kit.



ABOVE: Freelance HOn30 navy wagons. The navvies taking a 'smoko' break, and the tools and supplies in the store room end of the crew car, add weight to improve operation. Sheathing is HO scale corrugated metal. Lynn Zelmer, model builder and photographer.



LEFT: HOn30 navy wagons built on N scale chassis kits. The styrene dimension timber framing follows conventional shed construction practice. Lynn Zelmer, model builder and photographer.



ABOVE: The Fiji Sugar Corporation navy personnel car, typical of home-made wagons in use there, at Navo 2006. This photo, and another taken end-on, were manipulated in Photoshop to isolate the car from the background and served as the 'plans' for modelling. Timber sizes were estimated following 'common building practice'. Brad Peardon, photographer.

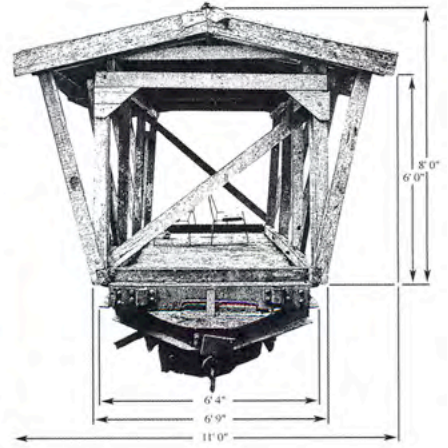
The On30 Navo (Fiji) Model

Brad Peardon photographed this car in Fiji; the Navo personnel car is unusual and a definite modelling challenge. It's typical enough of Queensland practice that it doesn't look out of place on my freelance cane railway. The fact that its width makes it difficult to operate on any layout is another matter.

Manipulating Brads' photos in Photoshop was the first step in developing the model. Isolated from their background clutter, these simplified images allowed me to identify all of the major timber elements and to establish proportions. The scaled dimensions

shown are based on an assumed underframe width, that of the inexpensive O scale (1:48) *Mountain Blue Miniatures* underframe (MBM-033) which I used for the model.

The timber superstructure primarily uses *Mt Albert* O scale lumber, with a small amount of *Northeastern* HO scale lumber. This was stained with watercolour paints (Payne's Grey and Burnt Umber) prior to assembly with gap-filling superglue gel. In assembling the car I tried to keep the internal frame vertical, giving the out-rigger roof supports a slight slant. The two end frames have the diagonal brace. I also added a diagonal brace on opposite ends of each side as



ABOVE: End view of the Navo personnel car with estimated dimensions based on an assumed width of 6' 4", the width of the commercial cast metal underframe I used for the model. Brad Peardon took the original photo.

the original construction could have been unstable in an accident or a heavy wind.)

The roof is *VR Models* O scale corrugated sheeting, the nut-bolt-washer castings came from *Grandt Line*, the two figures and detail castings came from a variety of manufacturers, and the timber tool box cum bench was scratchbuilt using dimension lumber.

Sometimes the best laid intentions can go astray. I planned to build benches for the Navo model, however I should have done so before assembling the superstructure. The toolbox cum bench was a compromise, but even it was difficult to glue in place with the superstructure installed.

BELOW: Fiji-style On30 personnel car, built on a *Mountain Blue Miniatures* underframe kit. The navy is sitting on a 32" x 5' x 17" high wooden box, also used for storing tools. Details include *Grandt Line* nut, bolt and washer castings; barrels; fire extinguisher; petrol cans; and a 'begging' setter dog. I still have to apply dry weathering colours to tone down the colours and age the woodwork. Eventually scaling almost 13' over the eaves, the car is too wide to operate on my layout, but looks good on a display diorama. Lynn Zelmer, model builder and photographer.



Acknowledgments and References

Greg Stephenson, and his photo collection, introduced me to the wide variety of navy equipment in mill use. Without Greg's willingness to share his resources I would likely not have developed as strong an interest in modelling Queensland's sugar cane railways as I have, and might not have developed the CaneSIG modeller's web site.

Additional photos, plans and modelling details can be found on the CaneSIG web site (<http://www.zelmeroz.com/canesig>). →