

## Irish Trains

by James Shields

Like many young boys, trains fascinated me, and I went through the usual phase of wanting to be a train driver when I grew up. I had the usual pull along train toys (including a wonderful wooden one that has been in the family for generations), and trips on the "big trains" were always to be relished.

I was lucky enough to have a 4.5v LEGO train with red wheels and blue track, although I was slightly too young to really appreciate it and it eventually got mixed into the general Lego box, becoming many fantastic trains over the years (or at least as long as there was enough track to make a circle and enough wheels to make a train).

I remember looking at the wonderful LEGO trains of the 1980s with envy, but by that stage I was "too old for LEGO", and the only additions were pocket money sized sets I could afford myself. At that stage I had a fairly large HO scale (and later N-gauge) train set, and the idea of replicating the local Irish trains fascinated me. As Ireland is quite a small market very few train manufacturers bothered making Irish trains and I was keen to acquire the few that were available. Perhaps it's a little unconventional running a 4-6-0 CIE tender engine alongside a Santa-Fe shunter, but I had fun.

Fast forward a few years, and, with the advent of eBay and some disposable income, I have collected quite a few of the "classic" LEGO trains, but like in my model train days, there's something missing. Of course, there are no Irish trains available, but unlike model trains there's the simple solution of building my own.



The train I take to work seemed an obvious place to start. It's a 4-car Spanish built DMU, and was one of the first trains to break away from the "black and orange" livery that has been standard in Ireland since the 1950s.

This was by far the biggest build I'd attempted, and it took me quite a while to figure out where to start. I'd recently noticed lime bricks, which were probably a factor in the choice of this train, but as it was a fairly new colour, the choice of bricks was quite limited. Train windows certainly weren't available in Lime, so I had to look for another option. After some searching, I found a SNOT technique using 1x2x2 transparent panels that seemed to suit my model. I had to improvise to get around the limited choice of bricks, for example 1x1 technic bricks weren't available, but 1x2 ones with 2 holes proved an acceptable substitute. Because of the substitutions, there are quite a few places where the train body

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## Also in this issue ...

### Modular Castle Town

by William Howard

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Details of an alternate castle module standard for producing collaborative displays with a medieval theme

### Space Monorails

by Stephen Juby

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A trio of space monorails covering the 'goodies' of the LEGO space universe.

### MW2006 Models

by David Tabner

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A selection of the smaller models from the Merrist Wood 2006 display. Details of the 2007 display can be found in the Events section.

# “The Association Matters”

Club News

## Chairman's Report

**Simon Bennett** ([chairman@brickish.org](mailto:chairman@brickish.org))

Happy 2007 to everyone and I hope you are ready for a great Lego year. There are some excellent new sets on their way, particularly the new Creator houses, 4954 and 4956, which this time round seem to have an adequate number of windows, unlike the 4886 Building Bonanza!

There are also going to be some great events, some of which are still being arranged and will be announced on the website and in the next Brick Issue. However, the next and most important Brickish event is the Annual General Meeting which takes place on the 31st of March at

Dilthorne Staffordshire. The meeting itself is only part of the day's festivities though, we will also be holding competitions, showing models and also having the now regular visit from the Lego Community Development Manager for Europe, Jan Beyer. More details can be found inside.

The following week is William Howard's annual Petersfield show, always a great event for the public and after that on the 21st of April there is Scotfest at Sian and Ed Hockaday's where the theme will be

Martin Long has taken over from Ian Greig as the co-ordinator for the Milton Keynes Window into the Community so if you have any models you'd be happy to show, let him and Tim Fegan (who looks after Bluewater) know so they can make sure we can keep the contents changing.

Now I'm off to build the other 2 models in 4953. See you at the AGM, online or at another event.

**Simon**

## Editor's Comments

**William Howard** ([newsletter@brickish.org](mailto:newsletter@brickish.org))

Well, it's been a hectic start to the year with very little LEGO activity for myself (outside of producing BI-11 that is!) But I did manage to build the large green dragon over New Year and it sits on my desk as a constant reminder of all the good things to come. And looking at the events planned in the next few months "things can only get better".

:-)

## Membership

The annual subscription is £8. For resident UK members renewing for two years the rate is £14. Subscriptions fall due on the first day of the original joining month.

Make cheques payable to 'The Brickish Association' and send to Jon Reynolds, The Brickish Association, 29 Paulden Road, Lostock Gralam, Northwich, CW9 7PQ

You must be at least sixteen years of age to join.

Administration of all members' address details is now performed centrally by members themselves using the on-line facility within 'My Profile' on the web site. If you have not verified your personal details recently, please check they are still correct as from now on, all copies of the Brick Issue and other mail correspondence will only be posted to the addresses held in the online database.

For your privacy, your personal details are only visible to authorised members of the Brickish Association committee. The Association will not disclose personally identifiable information to third parties, unless it is required to do so by law. For further information, please refer to the Brickish Association Privacy Policy available on [brickish.org](http://brickish.org).

## Events

### **Brickish AGM, Dilthorne: 31 March**

The Annual General Meeting of The Brickish Association is but a part of the day's proceedings. In addition there will be displays of MOCs, light-hearted competitions, general discussions and the usual evening meal.

### **LEGO Show, Petersfield: 7 April**

The 4th annual Petersfield LEGO show. There will be displays from various themes both big and small, individual and collaborative; and a number of sellers with everything from individual brick to MISB sets. Open to the public for part of the event; entry is free.

### **AirportFest, Perth: 21 April**

Scotfest in the Spring moves to Perth this year, where the theme will be "airports". The usual fun and games, show and tell, and trading can be expected.

### **Lego Trains, Glenrothes: 12/13 May**

LEGO trains display at the Glenrothes Model Railway Exhibition. Come along to help and/or show your trains/buildings, or just watch - all welcome

### **Merrist Wood, Guildford: 20 May**

The 3rd LEGO display at the annual Merrist Wood Summer Show. Displays of trains, castle/vikings, space, town, etc. Due to external constraints displays/exhibitors need to be co-ordinated before the event, so please contact the organiser as it is not possible to just turn up on the day and display models.

### **BI-12: 4 July 2007**

BI-12 scheduled to be posted to members. Copy deadline is 4th June 2007. Any and all content appreciated.

## Member Profile: Stuart Crawshaw and Naomi Farr

### \* What is your earliest LEGO memory?

**Stuart:** Not really a memory, but there is a photo of me on my first birthday with a Duplo brick!

**Naomi:** I have vague recollections of Duplo at nursery school.

### \* What was the earliest MOC you built?

**S:** No idea - far too long ago.

**N:** Probably small cars, but the earliest decent model would have been a house to go next to Dad's sacred Hornby railway. It took me ages to find enough white(ish) bricks.

### \* What brought you out of the dark ages, and when?

**S:** Mindstorms - when it first came out. Quite appropriate, since I was doing a PhD in control systems at the time.

**N:** Stuart, just a few years ago.

### \* What was your greatest LEGO moment?

**S:** Receiving a 7760 12V locomotive and transformer for Christmas (1980?) - it was extremely unexpected and kept me occupied for months.

**N:** Either, standing in Hamleys (aged 7) and wanting it all, now! Or, finding an old rusty tin of rare old parts (including an old-style Ambassador keyring) in my parents' garden shed.

### \* What's your favourite set, and why?

**N:** 6372 Holiday Villa - because Stuart hasn't got one! No seriously, it looked really good next to Dad's trains. More recently, the Designer house-building set 4886 is great; I would have loved one when I was younger.

### \* Are you a collector or a builder?

**S:** Builder (although I do have a large stock of MISB sets waiting for time/space to build them)

**N:** Mostly a collector: I'm still recreating things I used to build and/or wanted to own as a kid.

### \* What models are you working on now?

**S:** I'm building a castle-themed building (internal use not yet determined - possibly a feasting hall) and a Blacktron I-themed amphibious landing platform (dock) - mother-ship to the landing craft that I took to last year's Scotfest.

**N:** I'm just finishing a fleet of small cars (1980s and earlier), and waiting to start work on the internals of Stuart's ship. After that ... wait and see.

### \* What was the last set you paid full price for?

**S:** I bought 8134 Night Crusher for Naomi a couple of weeks ago (spot the small cars theme?)

**N:** I bought 4896 Roaring Roadster for Stuart's birthday last month.

### \* What LEGO-related activity do you spend most time doing?

**S:** Building (if you include thinking time) - I build a lot of small 'doodles' which don't always end up in completed models, but occasionally there's a good'un. And my larger models get worked on for months, usually, either due to design problems or (more often) lack of brick / waiting for BrickLink orders.

**N:** Sorting Stuart's LEGO. And searching for that one elusive element you know you've got somewhere...

### \* How do you sort your LEGO?

**S:** See Naomi's answer to the previous question!

**N:** Mostly by element, with some colour sorting and segregation (keeping new greys and brown out-of-sight)

### \* What's your favourite LEGO element?

**S:** The 2x4 brick - the quintessential element, with which you can build anything (provided you work in a large enough scale)

**N:** Jumpers (1x2 plate with single stud) - it has too many good uses.

### \* What would be your dream LEGO element and/or colour variant?

**S:** 2x2 slope inverted 45 double concave - it's an obvious omission from an otherwise near-complete palette of slopes.

**N:** Old grey cheese - the most useful recent element, and not available in grey!

### \* Apart from LEGO, what else are you into?

We play the various brass instruments - usually trombone (Stuart) and euphonium (Naomi) - in several local groups.

### \* What do your non-AFOL friends make of your hobby?

**S:** Most of my friends and family are used to LEGO, and often appreciate the models we build. People at work are generally more sceptical, but actually most of them don't know about it.

**N:** My friends think I'm odd ... but that might not be due to LEGO! However, we are very popular with our friends' children though.



## Irish Trains

by James Shields

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intrudes into the interior, but none of these are visible from outside. I also decided fairly early on to forego the standard train bases and build my own out of plates. I settled on a length of 36 studs, not too much longer than LEGO's longest official base.

The driver's cab and windscreen went through quite a few iterations. The first attempt used a 2x4x2 car windscreen between a pair of 1x2x3 slopes, but I was never happy with it, as it didn't capture the look of the real train. I tried a few variants using a yellow 1x4x3 train window, sloping it on a hinge brick. Finally, with quite a bit of help from Brickish members, I settled on a design using panel windows separated by plates and tiles to give a very good impression of the real windscreen.

I found MLCad a very useful tool throughout the design for trying out ideas and estimating quantities, though one has to be careful, as it's quite easy to accidentally create something that can't be built, especially when using SNOT techniques. I was also very pleased with the amount of help I received from Brickish members, both in suggestions for improving the design and in donations of parts.

For my next project, I selected a new train that has entered service on the Dublin-Cork route, mainly for its sleek and modern appearance. It's the first Irish train to have a streamlined front, although in reality this is just a generator van and the locomotive at the other end is a blocky old one with a new paint job.



The coaches have long tinted windows, which 1x2x3 panels seemed ideal for. I happened to mention this to Martin Long, and he very kindly sent me a bag of them so I felt compelled to build it. As with the commuter train, I used SNOT to place a line of windows on their sides. This presented one slight problem, as the windows are only connected to the train at the endpoints, the panels have a tendency to bow outwards, so some internal support was required to keep them stable.

The doors of the real train are lime coloured, so no official door was going to be available. I decided on custom doors, again using SNOT. The result is more or less to scale with the train, but is only 2 studs wide, so a minifig would have to turn sideways to board it.



For the roof of this train I decided to experiment. Like many trains, this one has a curved roof with groves running along it. I thought that tiles could be used to simulate the shape of the curve and the groves. I built it up, first using jumpers to make the outer part rise steeply and then more gently towards the top, finally capping it by using 1x2-1x4 brackets to raise the central row by half a plate. I'm quite pleased with the result, though there are some tiny gaps because of the lips of the tiles that I haven't figured out how to fill yet.

So far I've only built one coach, so I'll need a few more BrickLink orders to complete the DVT and some more coaches.

Although I started the design after the Cork train, my next project was actually finished before it, mainly because it's smaller and the parts proved easier to get hold of. I decided to finally have a go at something in the traditional black and orange colour scheme. In the most recent revision of that livery the locos had a large "IE" logo on the sides that seemed ideal for brick building.

I settled on the 121 class because of its distinctive shape, and because it was finally being retired at the end of last year after over 40 years service. The real train is just over 12m long, but it manages to look big and imposing, and I wanted to capture that and not end up with something that looks like a shunter. I decided to use a 24-stud train base to try and keep it fairly short so that it would end up reasonably to scale with the bigger locos I hope to build later.



The real train has a cab at one end, and a narrower body with a walkway along each side. My first experiments made the body 4-wide, but this didn't seem to capture the imposing look of the real train, so I widened it to 5 studs. I tried to capture the slightly pointy back with hinge bricks, but it came out a bit sharper than I hoped, so I'll probably come back and redesign that later. The logo was a lot of fun, and I think worked out well.

The cab is a little longer than it should be, but it gives the general impression of the real train. I'm still not entirely happy with the angled windows at the front, but the SNOT 33° slopes worked out very nicely for the rest of the nose. If the 1x3 curved slopes ever become available in orange, they would be ideal for the roof, but for now I've had to settle for more 33° slopes.

Overall I'm very pleased with this MOC, and I'm looking forward to building some black and orange coaches for it to pull.

Modelling any real railway in LEGO will always be a challenge because train designers don't tend to consider what LEGO parts are available before designing their trains. However, I have found it very satisfying to try and work through those challenges and find new ways of achieving the detail of the real trains.

As well as working on more train designs, I am now looking at the scenery they run through, and have designs for a couple of stations and bridges in the works. Eventually I would love to see a display of Irish trains running through Irish scenery.

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## Windscreen Trickery

by James Shields

For my Irish commuter train, I stumbled upon a technique for windscreens that proved very effective, and may be of use for other things. It's really a variation of Jason Railton's SNOT Sandwich from BI9, but because of the space constraints in a train windscreen, some extra trickery is required.

As with all SNOT, the critical ratio is 5 plates to 2 studs. I wanted a black plate and yellow tile on each side, and a black tile separating the two window panels, making 5 plates. The window panels were both 2 studs wide, so the whole thing added up nicely to 6 studs wide. I held it all together with 1x1 technic bricks and half pins. The only major problem is that the central tile pushes the window panels out so the studs no longer line up.

At first I thought a simple solution was to put a 1x2 plate with handle at the bottom of each panel, and this looked good in MLCad. It was only when I tried to build it that I realised that the handles would have to protrude into the outer body of the train (though that might work in a design that had panels for the body instead of bricks). It was back to the drawing board.

I replaced the 1x2 plates with handles for 1x1 plates with clips, and tried to put the plates with handles back into the train body, but the spacing wouldn't work there either. The only thing I could get them to clip to without

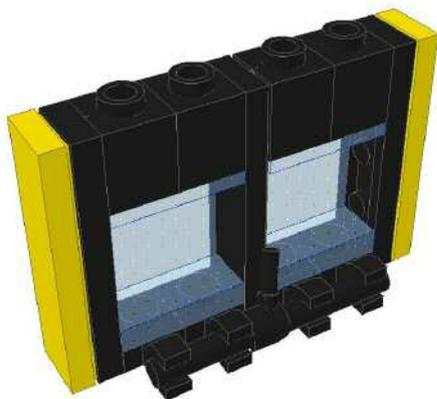


problems was a 4 long lightsabre. This worked well and I found I didn't even need any extra clips to attach it to the body. The only thing I needed to add was a minifig hand to stop the central tile from falling back.

To my delight, when rested on the 1x2x3 slopes and some cheesers, all that was needed to hold the windscreen in place was the top plate. The lightsabre stops it from moving from side to side, and the pincer movement of the cheesers and the roof stop it from falling out the front. It's even survived flying with Ryanair unharmed!

The technique may have other applications. Huw Millington has adapted it to a flat fronted train by turning it upside down and hiding the studs behind panels, while I'm working on a version using 1x2x3 window panels for a more streamlined train front.

I have jokingly called this method SNIAL for "Studs Not In A Line". This is not quite accurate, since they are in a line, just not evenly spaced. If you can think of a better name, why not suggest it on the Brickish discussion board?



# Modular Castle Town

by William Howard

*Mighty oaks from little acorns grow - details of my castle modules and the castle town displays they have been used in*



## The Module Standard

My castle module standard is designed around the 16x16 baseplate. A module consists of one or more baseplates arranged to abut on a 16-stud pitch. Modules of three or more 16x16 baseplates do not have to form rectangles; L-shape, T-shape and Z-shape modules are all permissible. There are two main module types - walls and buildings.

**Walls** are built to end on the centre line of a 16x16 module. Originally the walls were designed 9 bricks high to the parapet, with an 8-wide parapet, a crenellated external wall and a plain internal wall. The standard has since been extended to include 15-high, 9-high narrow and 6-high walls (<http://www.brickshelf.com/cgi-bin/gallery.cgi?f=95853>) - the latter being compatible with the CCC standard, but built on the centre line of a 16-stud wide baseplate.

**Buildings** are built on one or more 16x16 baseplates. Roads and alleys are placed at the edge. The centre line of a road runs down the edge of a module, therefore, a road 8-studs wide would occupy 4 studs on the abutting edges of two adjoining modules. To turn the road into a 4-stud alley, one of the modules would be changed with a module that had no road - or the existing module could be rotated to bring a face of the building to abut the other module. The standard allows for "throughfares" of 4, 5, or 6 studs at the edge of a module, thus permitting alleys/roads of 4, 5, 6, 8, 9, 10, 11 and 12 studs in width. The standard says nothing about alleys, roads, courtyards, etc entirely within a module, so to create a "shambles" area on a bigger module (say 3x3, ie a standard grey baseplate) is possible.

To summarise as a few rules:

### Sub-Modules

- \* A sub-module is 16x16
- \* Must be 1 of 4 types - no road, straight road, external road corner, internal road corner

### Modules

- \* Comprise one or more sub-modules with any road, and zero or more sub-modules with no road
- \* At least one sub-module with any road, must be on a corner with the road to the outside of the module
- \* There is no limit to the size of a module

### Walls

- \* Are special types of modules
- \* Are built to end on the centre line of a sub-module
- \* Are 6-high (CCC standard), 9-high, 9-high narrow or 15-high

### Throughfares (roads and alleys)

- \* Two types - streets and alleys
- \* The edge of an alley is the edge of a module
- \* The centre line of a street is the edge of a module (ie a street is two adjacent alleys)
- \* The nominal width of an alley is 5 studs, but can be varied plus or minus one
- \* An alley does not have to be uniform along its length - nor does it have to increase/decrease by one
- \* Internal streets, alleys, passages, courtyards, etc can be any shape/width desired

### Buildings

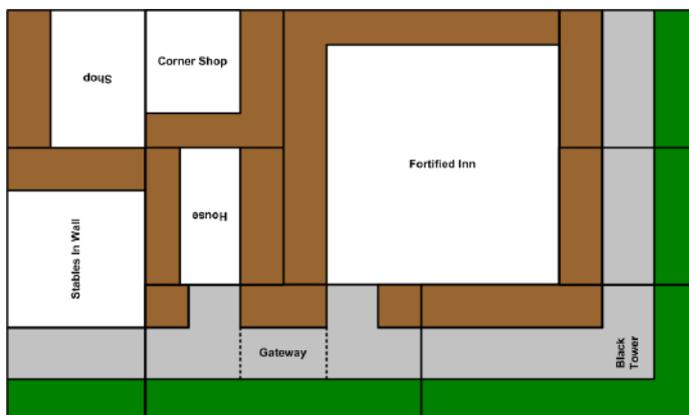
- \* Buildings must not overhang the module (this includes window sills and door handles)
- \* Decoration (flags, signs etc) may overhang provided they are removable
- \* All faces of a building should be detailed - just because the face of the building isn't adjacent to a road doesn't mean it won't be seen - the neighbouring module may be providing an alley

### CCC Buildings and Walls

- \* CCC standard buildings can be incorporated on blank modules
- \* Wall converters have been designed to change the centre line requirements of walls.

### Possibilities

With just 9 basic modules (comprising 15 sub-modules) it is possible to create a variety of layouts, two of which are illustrated



Green represents the area outside the wall, grey is the wall and brown are throughfares.



Details of individual modules can be found in my Brickshelf folder (<http://www.brickshelf.com/cgi-bin/gallery.cgi?f=125573>)

### The Modules In Use

So, from its humble beginnings as a few baseplates with building outlines scattered around my floor, where has it got to today?

**Jan 2004** - The first prototype walls and buildings proved the concept

**Yateley show, July 2004** - In desperate need of more modules and organisation!



**Petersfield Fest, Jan 2005** - Market Day at the Castle.

Display using just my modules, and then rearranged (taking about 30 minutes) to incorporate James Stacey's castle and CCC style houses.



**Piece-by-piece SH 2005, April 2005** - just three contributors can produce a fairly impressive display (set up time was under an hour from boxes of MOCs and empty tables to the finished display - without a plan!)



Photo: Ian Greig

**Shrewsbury Castle & Merrist Wood, Summer 2005** - Castle Town using (almost only) all my own modules.



It incorporates both modular and CCC style buildings and a mix of 15, 9 and 6 high walls. The layout comprised 121 sub-modules on an 11 x 11 grid measuring just under 5 feet square and took around 1 hour to set up with a further 90 minutes to add all the inhabitants!

### Merrist Wood, Summer 2006



### Conclusions

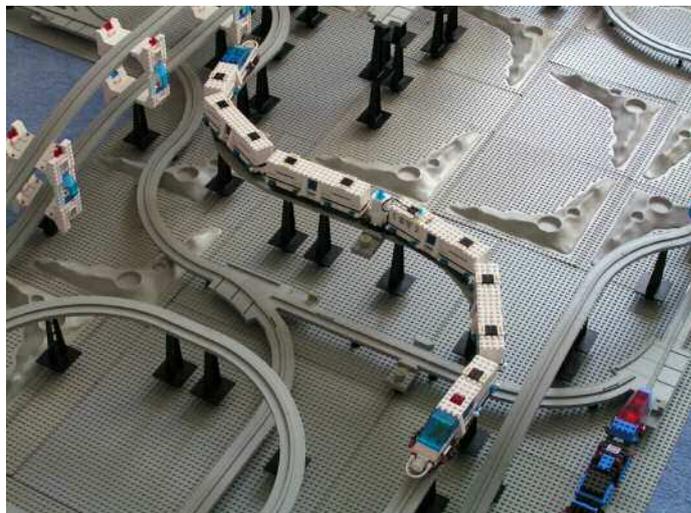
So why not just use the CCC standard? Good question. Perhaps not good answers but here are my two main reasons. Firstly, the walls are just too small. A wall that looks like it will blow over in a strong breeze just doesn't work for me. Also a wall where a mounted attacker can stab a defender or leap onto the parapet may work for Hollywood film directors, but not for a native of England. Secondly, the layout of roads and attachment of buildings takes too long - typically we have an hour to set up, two if we're lucky, less if we get stuck in traffic. Also, the displays have a short life-span, typically around 5 hours, so it just has to be quick to set up.

## Space Monorails

by Stephen Juby

### Extended Futuron Monorail

Monorail technology was pioneered by the Futurons who created vast networks to ferry supplies and personnel back and forth across planets with ease. The initial design employed only two cars and a motor core which, after accounting for the cockpit at each end and the power unit, only left space for one container, less than adequate for a *mass transit* system. Since the motor core offered power to spare, it was simply a case of adding further cars. Each additional car carries two containers and has a central pod containing a robot to help with loading and unloading.



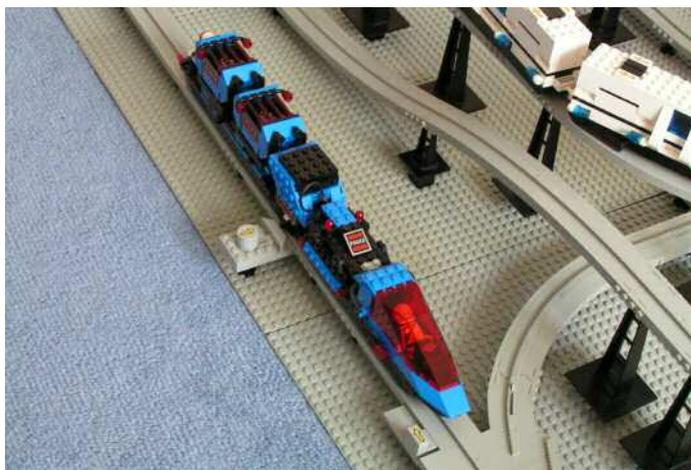
### M:Tron Monorail

The M:Trons dedicated themselves to helping others using their advanced technology. In order to ensure they can provide precisely the help required they use a system of interchangeable containers carrying different specialised equipment. The monorail is based on a very simple design with an open cockpit at either end. Making use of the Futuron monorail network it can carry up to two large crates and six smaller ones swiftly to a large number of space ports and outposts. Unfortunately, carrying such valuable cargo in such an open manner can make the monorail a tempting target for thieving Blacktrons.

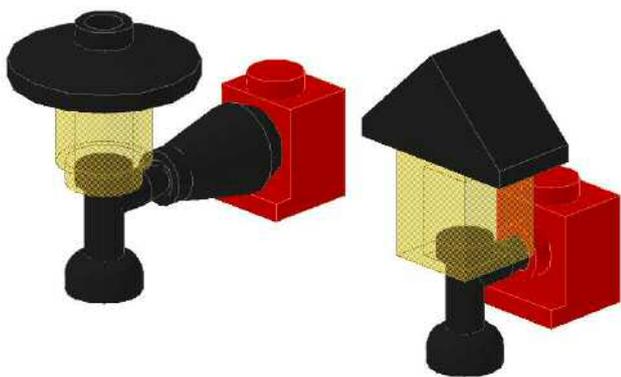


### Space Police I Monorail

The original Space Police were organised to counter the growing threat Blacktron spies were posing to innocent civilians. They are reputed to have the fastest ships in the known universe, and surveillance equipment equal to that of their Blacktron foes. Almost all Space Police vehicles have the capacity to carry a prison unit, although no one but the Space Police themselves are quite sure where the endless flow of prisoners are taken. The monorail provides another link in this chain, collecting occupied prisons from patrols along the course of the monorails and transporting them to space ports for deportation. It also provides a clear police presence on the monorail system, its superior speed leading to an impressive response time.

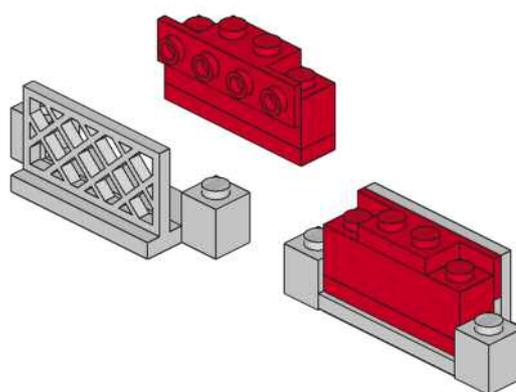


### BRICK TRICKS - 4



Lamps by William Howard

### BRICK TRICKS - 5



3LDU Offset by Tim Gould

## Merrist Wood 2006 Models

by David Tabner

### HMS Bonaventure - Assault Ship

The model is based on the principles of a Landing Platform Dock vessel to a standard scale of 1:120.

Ships of this type have a large internal well-dock which enables them to carry landing craft. By taking on water the ship lowers itself and floods the dock, thus enabling the landing craft to manoeuvre in and out.

The Bonaventure carries six landing craft in total, two of them on davits. She has weapon systems for self defence and carries helicopters. The ship carries a large number of Royal Marines to assault an enemy coast in the landing craft and helicopters.



### Ruston & Hornsby 16/20hp Narrow Gauge Locomotive

This model is based on a real Ruston and Hornsby 16/20hp loco from the collection at Amberley Working Museum. The original locomotive is a two foot gauge type built in 1938 that worked in a sewage works for most of its operational life. The model is built in the unusual sand green colour which is a closer match than the standard green. It is built at the appropriate scale for Lego Technic figures.



### MV Delphi Very Large Crude Carrier

The model is based on Very Large Crude Carrier (VLCC) principles to a standard scale of 1:120. The 'TABNER LINE' lettering at this scale would be 9'3" high on a real tanker.

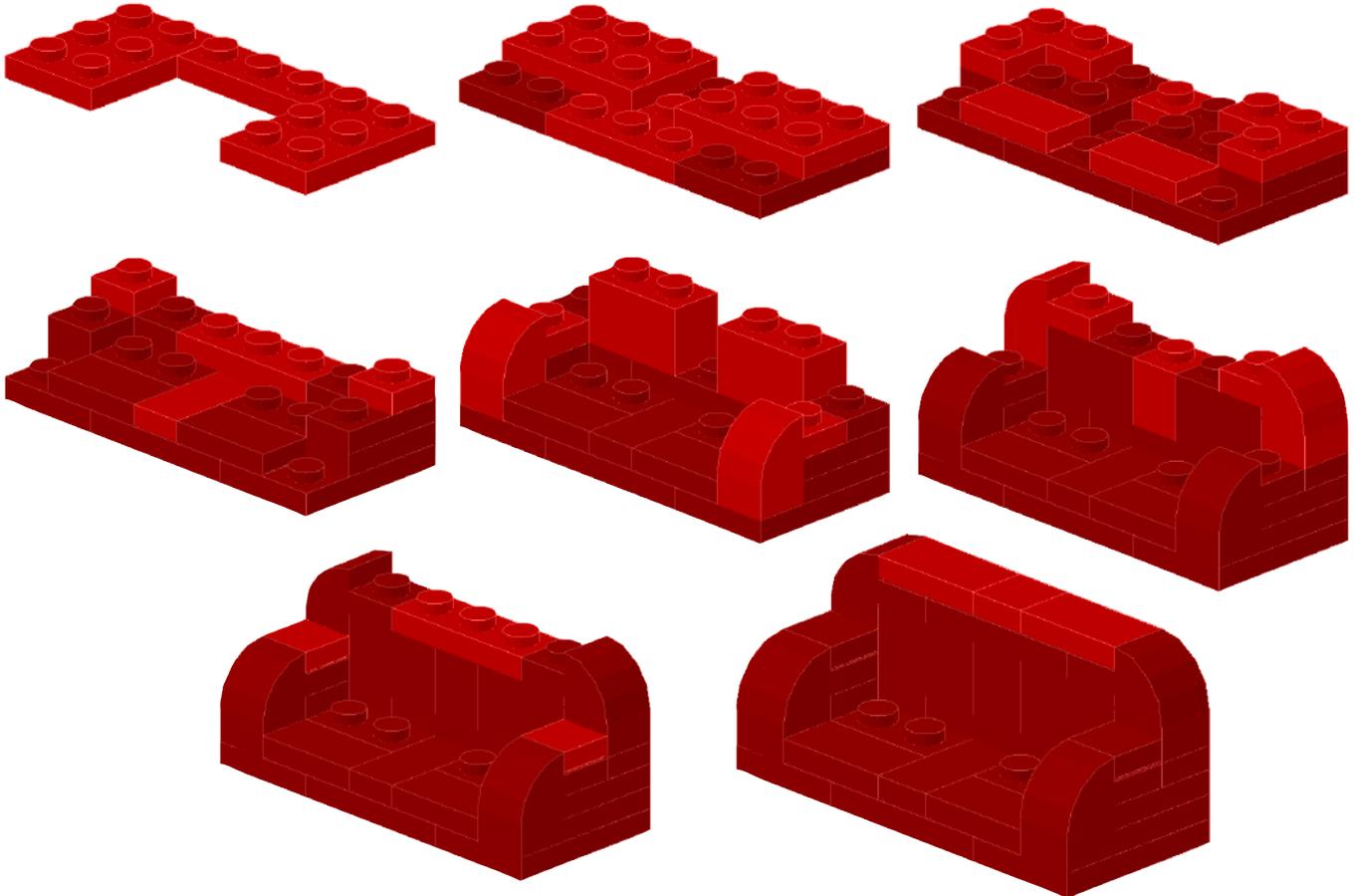
It uses a common tanker livery (white superstructure, red deck, black hull). The name comes from Greek mythology; Delphi was the oracle of the gods.

The model is 108 studs long with a beam of 16 studs.



### 11. Love Seat

by William Howard



### Double Cross Vignette

by Neil Martin

This small scene, in the LEGO world, is called a 'vignette'.

A vignette is a scene designed to fit onto an eight stud by eight stud base. This encourages creativity and the builder doesn't need a large collection of Lego elements to be able to participate.

Of all the things that I've built using Lego, this remains my favourite in part due to the subject matter and in part because of the facial expressions on the Lego minifigs. It took approximately one hour to design and build.



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