

# Building "PETIT LE MANS" - by Yves Lambert

## Introduction

Motor racing has always interested me, especially Le Mans. As a young boy I used to play for hours with a Jouef slot track together with my brother and father. My ultimate dream was to build a copy of the Le Mans circuit in scale 1/43 (Jouef) with all the scenery, but it never went beyond the planning stage. Growing up, I gradually lost interest (big boys don't play anymore...) but the idea always remained in the back of my head. Then the PC race games came up, but they could never give the feel that one was actually physically "driving" the car. At the age of 34 I discovered a 1/32 Fly slotcar in a toyshop in a town on the Belgian coast and was so charmed by its realism that I just had to have that car.

From that moment on, it all went very fast. I decided I would build my old Le Mans dream-track and purchased a Ninco-set to start off with. I then searched the internet for all kinds of useful background information that could help me shape the scenery and the track. And in the case of Le Mans, there really is lots of info available.

## Track Design



With the real trackplan in mind and using the Tracker2000 program, I designed my version of the real Le Mans circuit. Since this circuit only makes one big loop, I would be left with a lot of unused space in the middle. Therefore I added a twisty center-section that could fill that space and be a counterweight to the fast outside loop. I wish to add here that I have made many designs before I got it right to my taste. Once designed I immediately built it for real and testdrove it to see if it presented enough drivers' challenge. Only after some 20 design-changes I found what I was looking for. The nice thing about it is that many people driving it have different "crash"-points and that despite the twists in the center piece, it remains a fast circuit. One of the main features is the long straight, the "Hunaudières" which measures about 5m in total length, where my collection of

slot-LMPs can come up to full speed. Unlike the real circuit, the long straight is followed by a hairpin, where most newbies crash time after time. For the rest it is mainly a series of left- and righthand turns which need to be taken at the right speed and momentum, should you wish to win at "Petit Le Mans" !

## Table

Once the basic design was determined, I built the table, onto which the track would be laid. I chose to build a large solid construction of 5,4m x 2,6m at a height of about 1,25m. The table is strong enough to support a grown man's weight (as I regularly walk over it to add or change things) and can be wheeled about to allow marshalls some extra room during racing-nights.

From the internet, sites like [www.racebaan.com](http://www.racebaan.com) (in dutch, sorry !) which provided provided me with lots of information needed to start building.

## Figures & Buildings



On the lookout for contemporary figures and buildings I discovered SRA and ordered 3 pit buildings (and got two more for my birthday and one for Christmas...), almost all the SRA- and two MRRC figurine-sets. All these items were painstakingly painted by hand (or spray-painted in the case of the buildings).

I first cut away all excess material, then washed them in a mild water/detergent solution and let them dry for a night.

After that I applied a primer (very important !) and then colour after colour of standard modelling paints

(Humbrol/Revell), trying to work on as many figures with the same colour as possible. In this way you can avoid changing colours too often and getting bored because there are no results after a few evenings of painting. I

always start of with the main colour and

finish off with the details and do the face and hands last. Other people start off with the face, but it all comes down to personal preference. Do remember to get all the necessary sizes of brushes before you start, right to the smallest one: "OO". For the rest it is up to you, whether you use a realistic paintscheme for your pitcrews or your own imagination. I chose to add decals in 1/43 for extra realism.



Do realise in time that it is always nicer to have a pitcrew with a colourscheme fitting the car in the pits... On the internet you will find enough background info & pics on this subject to suit even the most demanding modeller.

For the buildings I decided to use a dull grey base colour just like the real Le Mans pitlane. The canopies on the pitwall were painted in the same colours as their respective teams. The lane itself was made with black abrasive paper and a painted MDF panel imitating the concrete plate of the real Le Mans pitlane, while the white markings were made using a Pritt corrector roller. To do that; roll off the required length of white corrector and apply a clear glue on the corrector side. Then turn upside down and push into place, with the

plastic side on top. Leave a weight on it for the night and when fully dry, gently tear off the plastic tape, leaving the white corrector tape on the track. Finally press it down with a soft rubber pad to make it adhere to the sandpaper.

### **Levelling & widening the track**

I first fixed a plastic foam used in hardwood flooring over the complete table-top, thus reducing the resonance/sound of the cars on the track. Then I laid out the track and fixed the Ninco borders in the turns, deciding which borders would remain red/white and which should be painted black to make it look realistic. A track with all red/white curbs looks very toylike, so it is important to determine where the cars would hit the curbs if it were live-action. I then cut straight MDF panels to size and also painted them black to optically widen the track.

The whole table was then covered with PS-panels (1cm thickness from DIY-store), laid out the track on top of it and outlined the whole thing.



I removed the track again (with the borders/curbs in place) and cut out the outlines in the panels. Once that was done, I put the track back in place resulting in a track level with the PS panels. After nailing the PS-panels and the MDF sides in place, phase 1 was finished, and a little testrun was in order.

### **Grass/Gravel pit**

After carefully studying many pictures from real tracks, I decided where the wooded areas and grassy areas would come. The exact location of the pitlane was chosen and the buildings were installed. Then I bought some grass sheets used in model railroads. Using a mirror technique with translucent plastic sheet I cut the grass sheets to size and glued them with standard white wood-glue (DIY) so that they would cover the edges of the borders and the PS-panels. Then the guard rails were placed alongside the track, carefully positioning them *AWAY* from the track



(like in real-life situations !) so that a car that comes off will NOT hit the guard rail straight away, but first slides over the grass and slows down somewhat (depending on the speed ofcourse !) before it is stopped by the rails. I also chose to have about five gravel pits to be located in just the right places and used simple brown abrasive paper to do the trick. I tried real sand, but its grain never seemed fine enough for 1/32, so I quickly abandoned the idea.



### **Guard-rails/barriers**

The technique with the flexible Ninco-rails is quite simple: just lay them flat right where you want them and make small incisions in the grass sheet, then use a big flat-tipped screwdriver to open up a hole in the PS-foam and push in the "feet" of the rails (after cutting of the retaining clip at the bottom). Using this technique I placed these rails

along both sides of the complete track.



### Fencing

Again very simple, get some fine stainless steel insect mesh (2,3 mm x2,3mm) from your local hardware store and cut it to size. Then cut metal rods about 1cm longer than the height of your fences (100mm in my case) and glue them at equal interdistances to the mesh. Next push the undersides of the metal rods in the PS-foam, and there you go !



### Billboards

Logos are easily found all over the internet and some slotracing sites have even collected them for you. All you need to do then, is print them on some clear self-adhesive film and cut them out.

For the billboards themselves I used a flexible white PVC poster profile (DIY) and simply stuck the logos onto them, making

sure I repeated the same logo enough to make it look good. After that I just glued the PVC profile to the guard rails...

Now the areas where I had chosen to place trees neede a forest floor. These areas were then covered with brown turf, then some dark green grass (in bags) and finally some green foam flocks, all used for model railroads.



### Trees

As you may or may not know the Le Mans track is located in a very forested area, mainly pines, so to recreate it I needed lots and I mean LOTS of trees to make it look good...

The trees are a story by themselves, having looked for realistic trees in scale 1/32 for a very long time, I finally found a website [www.canyoncreekscenics.com](http://www.canyoncreekscenics.com) which offered the right pine trees for Le Mans. After an initial order for a few finished trees and a "DIY"-package, I discovered that the trees were made up from a wooden peg and "branch & limb" material using a special technique rather unique to Canyon Creek. Once I had the hang of it, I bought lots of this branch & limb material and got to work on building 160 (!) trees myself using handcarved wooden



pegs (DIY store) painted and finished according to the newly acquired skill (many thanks to Pete Vassler for his expert advice !)

The 40 deciduous trees were self-built using Petite Pine Trees materials (US), which are in fact a kind of thick branch that has a remarkable resemblance to a tree in 1/32. On that tree you wrap polyfibre (from any hobby-artwork store) that was painted using

a colour wash. After that, spray the polyfibre with hairspray and sprinkle the same green foam flocks as used before.

To install the trees, just drill a hole in the bottom of the tree and glue a headless nail. The part of the nail sticking out should be the height of your PS-foam, so that you can insert and remove it easily. Just push it in and you tree will stay upright.

### Extra features



To fill the opening on the hatch in the middle of the table, I couldn't use too many trees because they would fall off eventually, as none are glued to the table. Le Mans is known to have many campers, so I chose to put a camping-scene on that location. I constructed the tents with toothpicks glued together over which I put an imitation tent made from real tentcloth.



I must admit that I had some help from my wife Kathy, who did the sewing for me, something I do not master at all.

The second feature is the Crash&Rescue scene with the Porsche. For that I ordered a slightly damaged body of a Proslot Porsche from Sean, which I then "damaged" according to some pictures I downloaded before. For the damage/burnt out-effects I used the standard modelling-techniques. I

wanted the car to look like it had crashed into the barriers and that a marshal had just pulled the driver out by the passenger door. That meant that I had to open that door. I therefore heated up my cutter-knife and, very gently, cut through the plastic to remove the door. Once that was done, I sanded the edges down with some sandpaper to obtain a smooth surface. One of the front wheels was then broken off and glued back in place in a tilted position, to make it look like the axle



had broken during the crash.

To complete the scene I added the marshal-helping-driver-figure and the SRA fireman.

To give the impression he was using his extinguisher, I glued some cotton wool to the nozzle.

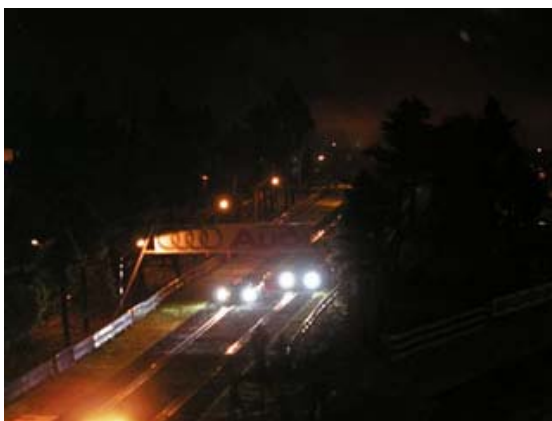
### Background

The background is a blown-up mirrored photograph printed on self-adhesive paper from my friends at a local advertising/printing agency. Unless you have good friends in these circles do not attempt to get this; too expensive !

### Track-timing

Done with Race-control, a German program with sensors UNDER the track which allow for a more realistic look (without the bridge). The monitor is suspended to the ceiling.

### Lighting



The last step was to add lighting, I therefore bought some "Life Like" multi-scale "Expressway lights", removed the plastic bases and replaced them with some fine aluminium tubing I found at a local model railroad store.

Do remember to pull the wires through the tube before glueing it to the lightpost.

After that I drilled two holes with different diameters. One fine hole just big enough to pull the wires through to the underside of the table and a second slightly bigger diameter just big enough to fit the alu tube and just deep enough to keep the light pole standing up (NOT all the way through the wood).

Then pull the electrics through the fine hole using a fine metal wire and insert the pole into the undep hole. Connect the wires to a controllable amp and enjoy the view !!!

This set-up allows to turn the voltage down for experienced drivers and up for the

inexperienced. You do, however still need the Xenon-lights in the cars. The lights are not bright enough to make everything visible, something I did not want anyway !

I hope this article will inspire fellow slotracers to build a similar lay-out, because the scenery adds so much realism and depth to an otherwise toylike track, that non-racers can enjoy the view while drivers enjoy the race !

One last word of advice: take your time to decide what you want, get the necessary background information and take pleasure in building the scenery !

Yves Lambert