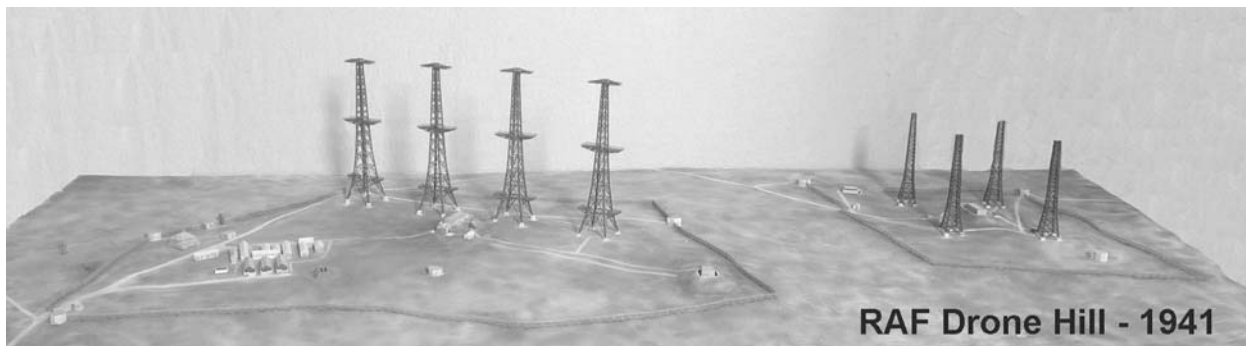


Modelling Drone Hill Chain Home Radar Station – Final Stages

By Rob Brown and Bob Thomson



In the first part of the article – see Fortune Teller No. 12, some background for the model was discussed along with a summary of how we constructed the base and the radar towers. In this second article we will describe the construction of the buildings, fences and roads and how these were integrated into the final model.

Completing The Base

Much debate occurred as to what the final finish should look like. Various experiments were carried out to apply a texture using different materials used in model railway construction but none were successful. In the end it was decided that a painted finish would give sufficient representation of the site at this scale of 1:500. The base was first given an overall coat of a light beige emulsion paint. Once dry various shades of green and brown were airbrushed over the surface. The result was a mottled effect, which from a normal viewing distance, was considered to be a reasonable representation of a wild, grassy area.

The next items were the various roads and tracks over the site. The first attempts used thin strips of card and plastic sheet cut to the required width then painted a suitable colour. Latterly the tracks were hand painted onto the surface. Pastel chalks of various colours were rubbed over the road surfaces to give them a more worn look.

Buildings

Construction of the buildings carried on in parallel to the work on the base. All of the buildings



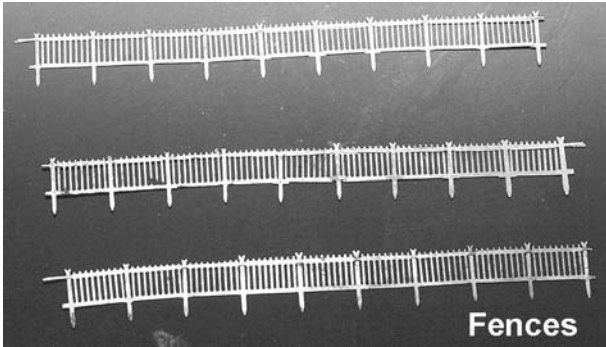
on the site were drawn up to be as near as possible to the originals, as noted from the aerial photographs and from measurements taken from the buildings still in existence. Each building was then constructed from hardwood. This was no easy task given the scale size. The most challenging structures were the various pillboxes around the site. Basically they were all octagonal construction of the same diameter but of varying heights, depending on the contours of the land. At first we thought – no problem it must be possible to get rod of this

cross section or use nuts – hexagonal yes but not octagonal. We even tried etching the things but in the end after a lot of very careful cutting and sanding they were formed from wood.

The next challenge was how to finish off the buildings. Painting was felt to give a very flat appearance. The solution was to photograph what would have been very similar buildings and where better than East Fortune to find such subjects. In the computer the images were shrunk to the correct scale size and printed out on paper, which was then cut up and glued to the wooden blocks.

Fences

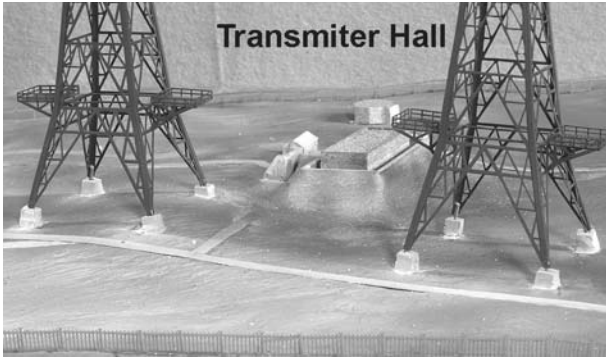
Having seen some rusting remains of the fence on the Drone Hill site we concluded the type was that seen even today. It is the standard “palisade” type and consists of vertical metal sections with spikes on top held with a horizontal bar at top and bottom. At a scale of 1:500 this meant the model fence would be approximately 5mm tall. The total length of fence required to surround both sites was estimated at 4m. The next challenge was how to make the fence follow the contours while ensuring the elements of the fence stay vertical. A design evolved using two sections of



etched brass strip. One strip had the intermediate posts, which would go into holes in the base plus the top horizontal supporting bar. The second strip had the intermediate vertical fencing plus a top and bottom horizontal strip. These two strips were superglued only at the top, allowing the assembly to bend slightly.

The Last Lap

We were now in a position to place all of the major components onto the base – the eight towers, countless buildings and 4 metres of fencing. Amazingly we all remained sane during this episode, spurred on by seeing the final model taking shape. Probably the trickiest buildings to put in place were the transmitter hall, receiver hall and power house, as these all had earth embankments for blast protection which had to be sculpted using model filler then blended into the surrounding land. After some tidying up of the base the model was declared complete. We decided not to add the aerial



arrays at this point as there is still some doubt as to their actual layout – even if you could see them at this scale!

Where Now?

Considerable thought now needs to be given to the best way to display this unique model through written information and photographs to enable the viewing public to get a real feel for what was, in our view, a monumental achievement in getting the Chain Home stations built and put into operation in time for World War II and in particular the Battle of Britain.

