My Boeing 747 Project

(Part 1)

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The Big Plan

There are some among us who plan out their modelling projects in detail, acquiring the various bits and pieces to make the perfect model and knowing in advance - more or less - how everything will fit together and what the end product will look like. Some of us are much more haphazard and make whatever takes our fancy. We often do the research after work has started, usually discovering that there were things that should have been done to make a better model, but now it's too late.

Occasionally, however, I make what one might call 'uberplans', not for one particular model but for a set of models. One early example of this was my set of Mirage IIIOs that depicted all the RAAF units that flew the Mirage. Then there was my set of A.330s and A.340s and, pushing the envelope a bit, my set of nine versions of the Boeing 737 from the 737-100 to the 737-900. Somewhere along the line it occurred to me that a set of 747s might be nice and so I started planning.

The original plan was for only four 747s; a Qantas 747-200, an Australia-Asia 747SP, an Ansett 747-300 and a Qantas 747-400. Over the years Revell has made separate kits of the 747 in 1/144 scale, a 747-100 (usually marketed as a -200) and 747-400. At the time when I was formulating these plans all 747s had the same basic fuselage but the 747-300 and 747-400 had an extended upper deck. The only one that had a really different fuselage was the 747SP that was shorter to reduce weight and therefore give that version a longer range. The major difference between the 747-300 and the 747-400 was a new, more efficient wing on the 747-400. Therefore, I reckoned that I'd need five kits to make the four 747s: a basic Revell 747-100 to make the Qantas 747-200, another 747-100 to make the 747-SP by shortening the fuselage (and I had an article in an old magazine that showed how this could be done); a 747-100 for the wings and a 747-400 for the fuselage of a 747-300, and a standard Revell 747-400 for the Qantas 747-400.

So much for plans

Over a few years I collected all the bits and pieces I would need to carry out this plan. Revell 747-100s had long disappeared from the shelves of model shops but they were still relatively common on ebay so I picked up three of them with little expense or effort. Revell 747-400s were also common on ebay and a lot cheaper than the ones that could still be found in model shops, so I got two of them. Decals came from various sources and a real find on ebay was a set of decals for the specially painted *Wunala Dreaming*, a Qantas 747-400, which would make a change from the standard red tailed Qantas 747-400s.

Then things began to change. The first thing I found was that making a 747SP out of a 747-100

was not as simple as it seemed. Cutting the fusealge would be a complicated business with a number of vertical and horizontal cuts to achieve the fuselage length and shape of a 747SP out of the kit fuselage. More difficult again was the fact that had eluded me so far, that the 747SP had a simplified wing in comparison to other versions of the 747 and that would also require a lot of difficult cutting, filling and sanding to achieve with the 747-100 kit. However, a new solution presented itself when Welsh Models released a kit of the 747SP, and I bought one to save myself all the effort.

This left me with a spare 747-100 kit, but the solution to that was simple. The only externally visible difference between a 747-100 and a 747-200 was the number of windows on the upper deck. Boeing had originally thought that the space behind the cockpit could be used as a crew rest area but the airlines soon decided that there was a lot of space up there that should be carrying fare paying passengers. However passengers seem to like having windows to look out of and they were installed with the first upgrade of the 747, the 747-200, resulting in a lot more windows on the upper deck of the 747-200 than the three per side on the 747-100. There were a few decal sheets available with the three upper windows, so a nice Pan Am sheet gave me the possibility of making a 747-100 in addition to the others I had planned.

The other disruption to my plans came when Boeing announced that they were going to produce a new version of the 747, the 747-8 and that there would be two versions of the 747-8, the freighter (-8F) with a shorter upper deck and a passenger version, the 747-8I (International) with the extended upper deck. This version would have a longer fuselage, redesigned wings and new engines, making it virtually new aeroplane. I had visions of having to do some major work on even more 747-400 kits to make these versions to complete my 747 set but soon enough Zvezda and Revell announced that they would be making kits of these new versions, so all I had to do was buy them when they came out.

The difference between the 747-8I and 747-8F set me thinking about a possible resolution to the remaining difficulty of my plan, what to do with the left over 747-100 fuselage and 747-400 wings. A little bit of research soon showed me that the freighter version of the 747-400 has the shortened upper deck so, by fixing the 747-100 fuselage to the 747-400 wings I could make a 747-400F and have no embarrassing 747 bits left over.

So, before any work had begun, the scope of

Everything the young modeller needs to make a set of seven Boeing 747s (the Revell 747-8F had not been released at this time). From the top: two Advent (Revell) 747-100s, a Welsh Models 747SP, another Revell 747-100, two Revell 747-400s, a Zvezda 747-8I and a pile of decals starting with the BraZ Decals *Wunala Dreaming*. Paint and hours of struggle not included.

my Boeing 747 plan had doubled. There would now be a Pan American 747-100, a Qantas 747-200, an Australia Asia 747SP, an Ansett Australia 747-300, a Qantas 747-400 finished as Wunala Dreaming and a 747-400F, a 747-8F and a 747-8I with whatever liveries seemed appropriate. Best to get going with the project before anything else happened to make it even bigger.

There is, of course, the Boeing 747 'Dreamlifter'. But it's far too ugly to want to make under any circumstances.

One thing that you have to remember with 747s is that most version have flown with the option of Pratt & Whitney, General Electric and Rolls Royce engines. You have to find out which engines an airline used on their 747s. Fortunately Revell have offered their 747-400 kits with different engine versions and there are enough decal options available that it is not difficult to match the engines of the 747 kit you have with the appropriate airline.

But Wait, Here's One I Made Earlier

During a moment of contemplation on this project I remembered that I'd already made a 747 model, back in 2005. It was a standard Revell 747-400 with Hawkeye Qantas decals. However, it was made back in the days when I still used enamels

rather than lacquers and, as I later discovered, white enamel paint tends to yellow with the passing years. I also made this model in the days when I was still trying to make airliner models with transparent windows rather than the decals that I have fallen back on more recently. Holes in the fuselage filled with transparent glue might represent windows on airliners a bit better than decals but achieving that result uniformly along a fuselage (especially on a kit that doesn't have windows in it in the first place) is beyond my modelling skills. (The idea of trying to replicate all the upped deck windows of a 747-200 on a 747-100 kit with any success was enough to put me off the idea forever.) As a result of its age, this model looks a little yellow these days and has transparent windows. But it doesn't look too bad, does it?

Pan American Boeing 747-100

This kit was made more or less straight from the box. For the time it was made it's not a bad kit that doesn't need much work. One thing that has to be done, particularly if using decals with all those windows as part of the livery, is to fill in the windows. There are several ways to do this but the one that works for me is to use Selleys Multi purpose Knead It, a two part epoxy putty. It's best to do the job in parts because this stuff hardens fairly quickly so if you make up enough to do all the windows you'll find yourself with a solid lump of stuff and not all the windows filled. I roll it out in strips and push it through the windows from the inside with a little bulging out through the window holes. If you time it just right and the putty has not quite set, you run your knife along the line of little pushed through lumps and cut them off smoothly along the fuselage. If you do it just right there is no need for any more filling and sanding.

What you get in the box of a Revell 747-100

Little bumps of putty where windows used to be

The thing that I've been doing of late, and did with all the 747s, was to make and finish the engines before I attached them to the rest of the aeroplane. You may not have noticed that engines are not just silver these days, they are made up of a complex pattern of tones and colours. There's the fan disk, the interior of the intake, the intake leading edge, the exhaust from the fan section, the exhaust from the

All the major parts assembled with a coat of primer to check for imperfections. My local hobby shop has a can of Tamiya pink primer. I wouldn't recommend it, especially if you are planning on large areas of white.

hot section and then the colour of the engine body, and possibly more. Doing the painting and masking for all this complexity while the engine is stuck to the wing is all but impossible, so finishing it off first, masking everything and then attaching the engine to the wing, saves a whole world of pain.

Talking about engines, the auxiliary power unit of the 747 is located in the extreme tail where its exhaust is blindingly obvious. However it is poorly represented in both Revell kits and needs to be replaced with a bit of suitably sized plastic tubing painted dark metallic grey.

Two Six make decals for a Pan American 747-100, N747PA, which was the second 747 off the production line and the first to enter service. I could not resist it.

There is a trick to getting the line between the bare metal of the lower fuselage and the white of the upper fuselage right. I'm sure that this is not a secret and that everyone who makes airliner models knows it, probably passed down from generation to generation of modellers (along with a secret handshake most likely) but I had to learn it myself the hard way. It is this. Make a copy of your decal sheet, place the copy of the decal on the model where the decal will go - this has to be a very precise location - and then mark where the bottom of the line is. It is best to extend the white down to the bottom of the decal because most airliner decals have a bit of show through and work better on white than on silver. If you get the location of the line between the white and silver wrong and try to hide it with the decal you will almost invariably be caught out by the line showing through the decal and never win any competitions with the model.

The other thing you will notice is the metallic finish on top of the wings and tail planes. It is a corrosion preventative coating called 'Coroguard' and most modern airliners have it. You can paint this on yourself is you have some Xtracolor Coroguard or you can buy decals which give the same effect. They are for a 747-400 but a little trimming brings them back to 747-100 standard.

The bare metal bits of the model are all Tamiya TS-83 Metallic Silver. The only other colour involved is a light grey, BAC707 which Boeing use on most of their aeroplanes. I got a special batch of this made up a few years back, automotive lacquer which is a lovely paint to work with.

In Part 2

Turning a box of plastic bits into a reasonable replica of Qantas's first Jumbo, making the Welsh Models 747SP and the plastic surgery that creates a 747-300.