

For those who love aviation the way we love automobiles, December 2003 will be the most memorable month ever - the centenary of powered flight. Since the Wright Brothers first flew their self-propelled glider way back in 1903, we have leapt across oceans like they were millponds. Today on a flight, one may hardly spare a thought about the intricacies of flying - there's plenty to occupy you otherwise - business or pleasure. Before you know it, it is time to disembark.

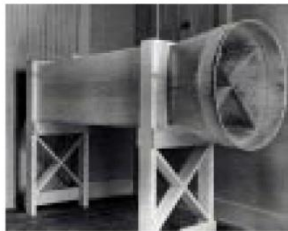


Back in 1903, powered flying was a challenge many hoped to conquer, but just two succeeded - Wilbur and Orville Wright.

From humble beginnings in 1892 as bicycle repairers, the brothers quickly graduated to manufacturing their own called Van Cleves and St. Clairs. The death of a famous German glider pilot in 1896 prompted Wilbur to write to the Smithsonian Institution in USA, seeking information on aeronautical research.



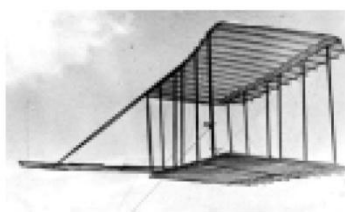
Between 1900 and 1902, the brothers laboured unsuccessfully, but persevered.



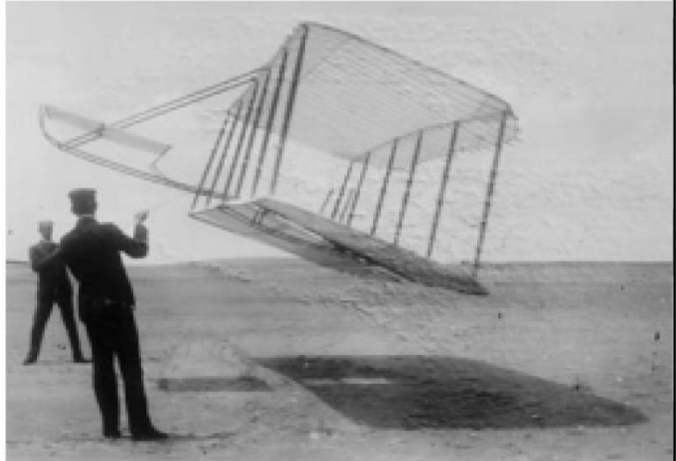
They created a wind-tunnel, pioneering the concept, to enable in-house testing of their glider designs. The 1902 glider flew a record 620 feet. Having put the proverbial wind beneath their

wings, they concentrated their efforts on developing a propeller and engine - to pioneer powered flight. They developed a 4-cylinder, 12 hp engine, built by Charlie Taylor. The propellers were designed using similar principals to that of the wing design.

On 14th December 1903, Wilbur won a coin toss and made the first attempt at powered flight. The engine stalling shortly after takeoff, caused the plane to crash. Damage was minor and was repaired on site. At 10:30 a.m. on 17th December 1903, Orville made the first heavier-than-air, machine powered flight in the world, lasting 12 seconds and covering just 120 feet. He achieved what humans dreamed about for centuries.....he flew!



1900 - The Wright kite, the first attempt at flying, had to be towed by two volunteers while the Wright Brothers made their observations.



1901 - The Wright Brothers with their modified glider.



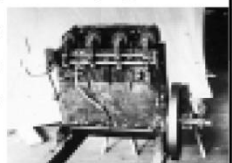
1902 - Orville Wright - airborne.



17th December 1903 - The first powered flight



The man (Charlie Taylor) and the motor (4 cyl. 12 hp engine).



Meet the Auto-aficionado Turned 'Aviator'!

Building the Scale 20 Wright Flyer One

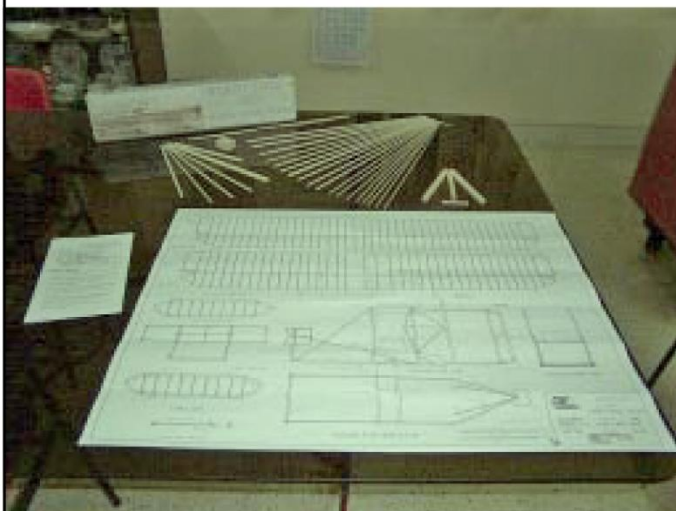
✈ 3 Days ✈ 258 Parts ✈ One Attempt!

Hi folks! Clyde's on stage and this is the very first newsletter in which you'll hear from me direct! This newsletter is loaded with bitter-sweet memories and a whole load of nostalgia - and dedicated to the memory of a master modeller, craftsman, painter *par excellence* and above all, a very dear friend, **Patron K. S. Raman**, whose untimely demise on 16th July 2003 leaves a void which will always remain.

You may ask - what's a bird doing in a collection of wheels - here's how it all began.

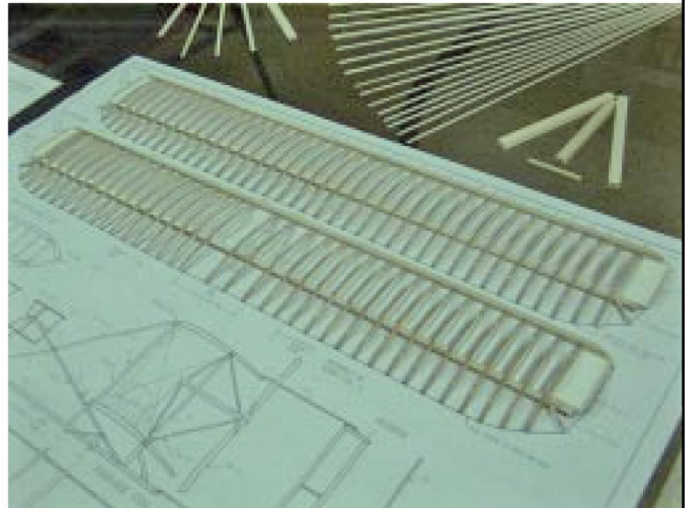
I must admit that Neil has always been the driving force behind all the innovation at Autofest City. The inclusion of an aircraft was one of his brainwaves - on the lookout for the Unique, the brain suggested the World's First Motorized Aircraft. The Internet told us that Easy Built Models of Penn. USA marketed kits; **Patron Andy Jabbar** got the kit to India in December 2002 and I got the shakes!

Shakes because on opening the box I found around 2 dozen balsa-wood sticks of match-thickness, two sheets of tissue, a full-size plan and an instruction manual that sprouted aeronautical terms like nursery rhymes! I hastily replaced everything and tucked the kit at the bottom of a cupboard, hoping that it would explain itself out.

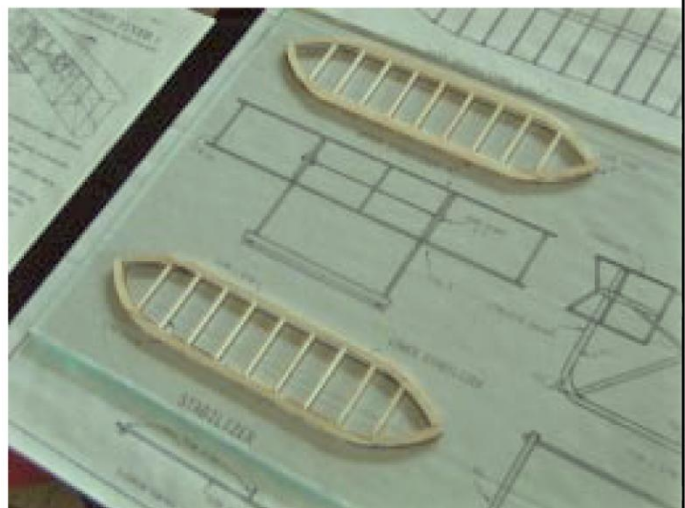


In the months that followed, I removed and replaced the kit no less than SIX times - in all the dozen or so plastic die-cast kits I have assembled in the past, never have I expressed so much hesitation in beginning. But I knew next to nothing about aircraft and had never built in wood. Neil goaded me on - like he often does, and told me what the hell, it's only wood. I began - to the sounds of PLENTY of encouragement and within two and a half days - the Wright Flyer One was ready to take wing!

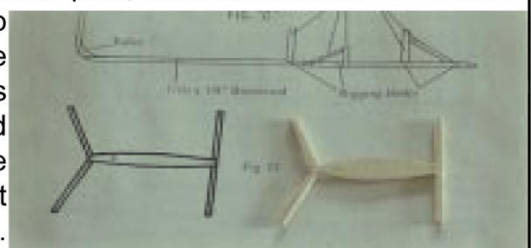
Here are some visuals of the various stages in building the Wright Flyer One and on completing the kit, my feelings soared as high as those of Orville and Wilbur Wright on that sunny morning on 17th December 1903, when the Flyer slipped the surly bonds of earth and danced the skies on laughter-silvered wings.



The plan and the manual agreed on one thing - that 74 ribs were to be cut out of a balsa-wood sheet and the wings assembled. This pic shows the skeletons of both the wings.



The stabilizers came next, closely followed by the struts, not on the plan, but in the manual. Three were needed to hold the stabilizers apart and provide the needed lift to the plane.



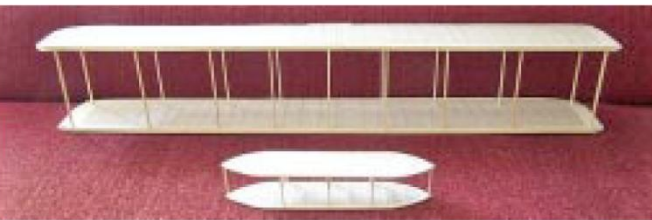
The next step involved wrapping the wing frames, a delicate job involving applying glue to the entire frame and placing accurately on very curly paper which turned out to be as tensile as cloth and just as porous. Went off well, with both the wings and both the



stabilizers looking like they'd be able to hold many times their own weight in the air.



Wings and stabilizer units had to be 'strutted up' with 18 square stems of 1/16" and three pre-constructed stabilizer separators.



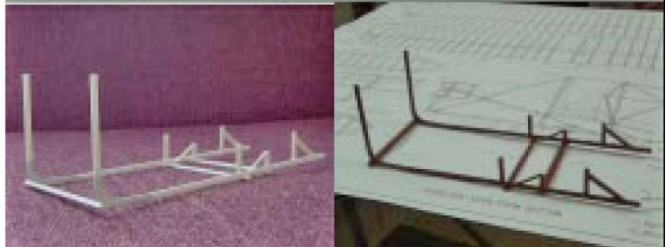
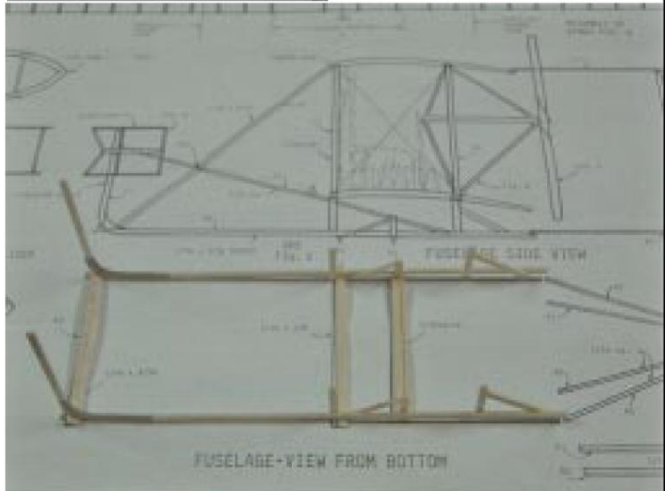
Closeups speak the details. Glue supplied with our plastic die-cast kits was of immense help here. Painting the struts the colours of the actual Flyer was the next step - this was following the look of the actual replica at the Smithsonian Institute in the USA.



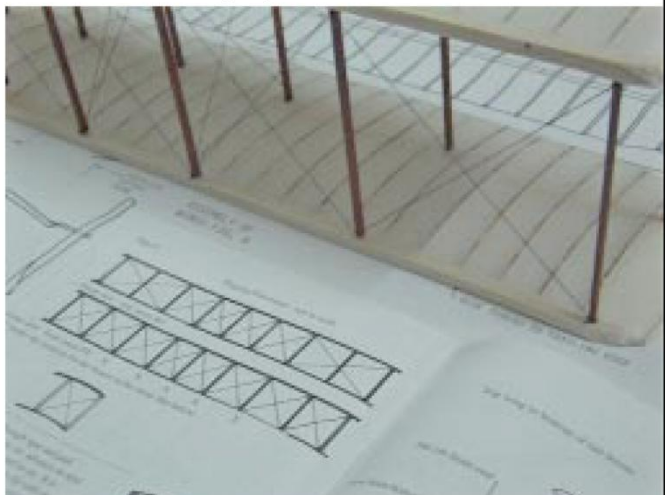
Steering control came next - the rudder was fabricated out of balsa and, like the wings, paper-wrapped.



The frame was next on the agenda - to be crafted out of balsa, bass-wood and a curve which defied either of the above, which had to be cut out of card-stock. I had to refer to both the instruction manual and the plan to get this one right and the former could have been a little more helpful here!



Rigging instructions followed - now this is where the Easy Built boys hastened a little. Rigging should have been AFTER the propeller frames were installed!



Doing it the Easy Built Way involved intricate prop-frame installation - *hardly* Easy (!) and gluing them to the wings was a builder's nightmare, but I managed!

I then installed the engine block and did my own plumbing to make the model as close as possible to the real thing. I also fabricated a radiator and a gasoline tank and affixed them to the front wing-struts.



The next thing to do was instal the rudder. Top and bottom mounting was cut out of balsa wood and the rudder was installed. To ensure that it was positioned centrally on both axes, a 'truck', a strip of balsa wood was used as a base block to hold the rudder in place while it cemented. Paintwork to suit followed.



This picture shows the propeller frames installed but the contortions I had to do to get them in place shortly before this stage would have made a gymnast shy!



The propellers were carved out of soft wood and sanded to shape a la instructions, I pierced them with a paper pin each and affixed the pin to the prop-frame. Painted both propellers silver like the real thing, then affixed the drive chains and built the little seat for the sole human being this frail craft would hold - the Pilot. **Voila!**



The Flyer on the ground

Various angles of the Flyer One

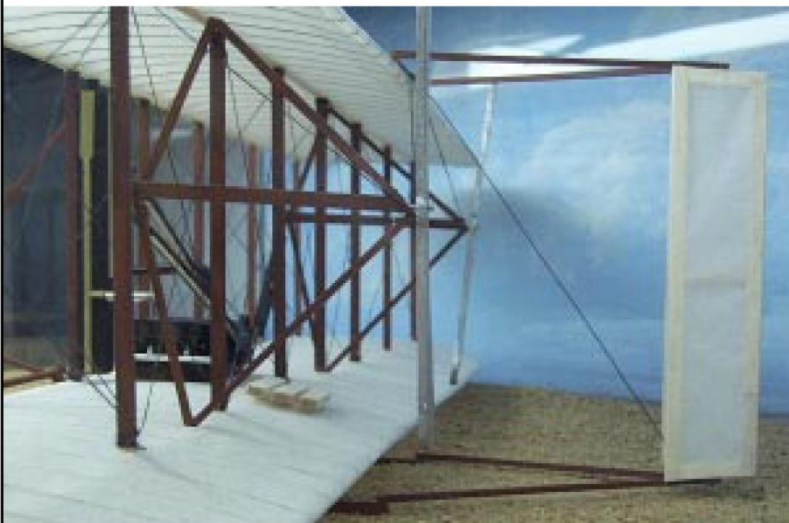


That's yours truly with the Flyer One

Don't go away ... there's more ----->>>



Mum added her own brand of magic to the Wright Flyer One - the rear of the glass case is a painting closely resembles the sky on that winter morning in 1903.



The aircraft is placed in a specially-constructed sandpit. Closeup photographs taken closely resemble authentic outdoor scenes. (Right) Top view of the Flyer in the sand pit.

Editor's Note: This Wright Flyer I kit is now a laser cut kit. The printed wood kit is no longer made.