

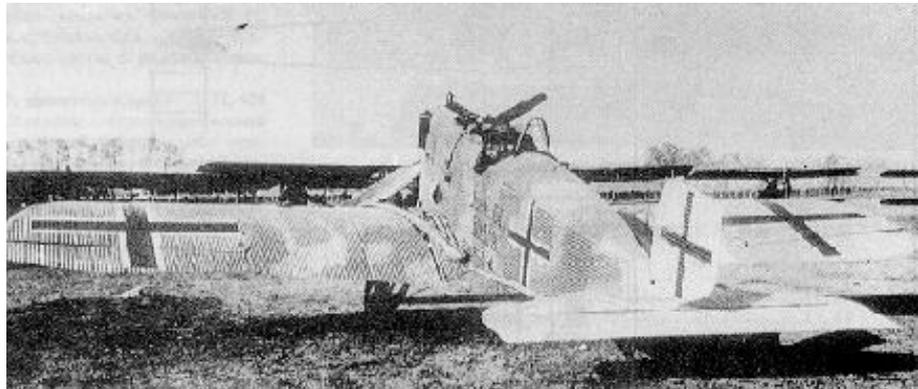
Junkers D.I

History: When World War I began it was less than eleven years since the Wright Brothers had made their first flight at Kitty Hawk and less than a handful of years since flying had emerged as being relatively reliable and safe. At the end of the war, four years later, there had been significant improvements in aero engines and aerodynamics. But little advance in aeroplane construction. Most aeroplanes were still made of wood and canvas held together by rigging wires although there had been some developments including metal frames and strong wooden wings. However, the only advance into the future of aeroplane construction came from Hugo Junkers.

In 1912 Junkers patented a new aviation construction process of a framework of thin duraluminium tubes covered with sheets of corrugated aluminium. This led to the design and construction of the first all-metal aeroplanes and also allowed the development of thick cantilever monoplane wings. The combination of these factors led to the evolution of a new kind of fighter that set the formula for what would be commonplace twenty years later.

When World War I began Junkers convinced the German Air Force of the potential of his ideas. The Junkers J1, a heavily armoured ground attack aeroplane, made its first flight in the winter of 1916 and proved invulnerable to allied fire. This success led to several developments including the J7, a fighter, that flew for the first time in September 1917. It experienced several problems, the most importantly that it was heavier than contemporary wood and canvas fighters so that the most powerful engine then available, the Daimler D.IIIa left this new metal fighter underpowered. However, since the fighter was basically sound and not designed for aerobatics, Junkers persevered with the project. A developed version, the J9, was entered in the Second Fighter Competition of July 1918 and flown by most of Germany's greatest pilots. Generally they did not like it but a couple, including Goering, recommended that it would be suitable for the hazardous task of attacking balloons and airships. Consequently 40 were ordered. Production was slow and only 15 had been constructed by the end of the war and production was terminated by the Allies in January 1919.

Only a handful of D.Is had arrived at the Western Front before the end of the war so they made little impact. However, during that period there was much wet weather and the D.Is could operate while wood and canvas aeroplanes were restricted and they deteriorated quickly in such weather with the D.Is didn't. German air forces also became involved in the Baltic States struggles against Russia in 1919 and the D.Is were considered the best aeroplane for use in the adverse weather conditions there.



Despite the advantages of the all-metal D.I fighter, development focussed on the wood and fabric biplanes that had dominated the air war during World War I. Not until the 1930s did fighters return to the all-metal monoplane formula that the Junkers D.I had pioneered.

Data: Single seat fighter. *Engine* one Mercedes D.IIIa inline piston engine of 188kW

(160hp). *Wing span* 9m (29ft 6in). *Length* 7.3m (23ft 11in). *Maximum take-off weight* 834kg (1838lbs). *Maximum speed* 176km/h (109mph). *Range* 250km (342miles). *Armament* two 7.92mm machine guns

The kit: Roden 1:72

Roden, and the earlier Russian company, Toko, have revitalised World War I modelling. Unlike most of the previous kits available, the kits they make possess the delicacy and crispness of mouldings that make them very attractive. Just opening the box of one of their kits and looking at the mouldings in their cellophane packet is enough to make you want to make one. That's what happened to me with this D.I. One look and it was love at first sight. My hands were shaking with anticipation as I ripped aside the delicate wrapping to fondle its delicately formed details.

This is a very simple kit, complicated only by the delicacy of the parts and the



corrugations. As with other corrugated aeroplanes, you have to be very careful in assembling the fuselage and wings because there can be no filling and sanding gaps. Everything has to be lined up and glued very carefully so that there are no gaps or misaligned parts. Fortunately this kit is so well engineered that even a ham fingered modeller like me would have to work hard to make a mess of things. The engine is almost a separate model with seven delicate components. Again, some of them are

detailed and fragile so that you need to be careful in separating them from the sprue and locating them properly. (I had a bit of trouble with the undercarriage legs because I got them reversed, but that probably just me.) If I needed to think of a criticism, about the only thing I could think of would be that the interior structural tubing is not visible in the cockpit as it is in the real thing. I also lashed out and added a lap seat-belt just to add a little more detail to the interior to match the detail of the rest of the model.

There seems to be only one colour scheme for this model in service; light blue underside and green and a kind of brownish/purplish colour on the upper surfaces. The kit instructions give Humbrol paint numbers for the colours but when you go to the display of Humbrol paints at your local model shop, or even the big shops in Melbourne, some of the colour numbers given simply don't exist. This means trying to track down the colours of the missing numbers and trying to find alternatives or mix the necessary colours. This was perhaps the most difficult part of the entire construction process.

The most disappointing part of the process was the decals. Don't get me wrong, they are very nicely printed and the film is nice and thin, but I struggled to get them to snuggle down over the fine corrugations of the kit. I tried everything I could think of and managed to get them to settle a bit, but they are far from perfect. If I was doing this again I'd trim the decals right up to the edge of the colours because the problem isn't so noticeable with the black and white crosses. Even so, the serial numbers on the fuselage sides would still be a problem.

The finished little model looks almost as nice as it promised to be when I first saw it. The only thing that is lacking is one of the machine guns. The last time I saw it was when it went flying through the air off my work board. It hit the wall and dropped down behind the filing cabinet. If you think I'm going to empty and move that for one tiny machine gun you've obviously never had to do it yourself. Even so, it is still a very nice looking little model.