



**Lockheed SR-71 Blackbird**

**Kit No:** 145

**Scale:** 1/72

**Type:** Injection Moulded Plastic

**Manufacturer:** Italeri  
*The Hobby Company/MRC*

**Aftermarket:** Kiwi Resin Models  
Lockheed A-12 Project Oxcart Conversion  
[www.kiwimodels.nz.com](http://www.kiwimodels.nz.com)



The contents of the Kiwi Models resin conversion kit



Assembled kit cockpit section with Eduard bulkheads in place



Eduard nose wheel bay in place

# Archangels and Ox carts

Into the Thermal Thicket  
By **Tony Grand**

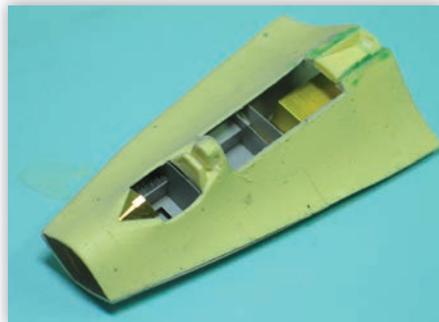


It first flew in 1962, shaped like the flat blade of a broadsword extending forward from a pair of delta wings. The A-12 not only looked and flew like nothing else in the sky, it was built like nothing else. It was built largely of titanium, obtained (ahem) largely from the Soviet Union, imported into the USA by the CIA. Back a bit. Before the first flight of the U-2 spy plane in 1955, the US intelligence community had realised that even such a high flying bird as this would rapidly become prey to Soviet surface to air missiles. At first, the answer seemed to be to add coatings to the U-2 to reduce its radar cross section (RCS) or grids of wire to the same end. These experiments had little success and attention turned to developing another subsonic plane for over flights of the Soviet Union, this time incorporating from the outset all known RCS reduction technology. As with the U-2, the Lockheed Skunk Works, headed by chief designer Clarence 'Kelly' Johnson, was put on this task, Operation Gusto, the U-3. However the intelligence community also saw that speed plus a low RCS might well be the way forward and Johnson agreed to start work on 'supersonic Gusto. As had always been his method, Johnson worked from sketches he'd made in a notebook, named U-3 by him but nicknamed Archangel by Skunk Works colleagues. The U-2 had been nicknamed Kelly's Angel. Something this far in advance had to be Archangel. The design that made the cut was A(rchangel)-12. Its first flight took place on 26th April 1962.

Now reader, it is a truth universally acknowledged that most 1/72 plastic kits of the Lockheed Blackbird family leave a lot to be desired. There are four main Blackbird variants; the A-12 Oxcart, the CIA's single seat vehicle; the SR-71, the two seat US Air Force development of the A-12; the YF-12A, the single seat fighter

development of the A-12; and the MD-21/D-21 mother and reconnaissance drone combination, the MD-21 being a two seater version of the A-12. There is no kit of the A-12. All SR-71 kits that I have seen do not have the appropriate flare of the chines on the nose area, wider than the A-12 but narrower than the SR-71. The Italeri and Academy kits refer to the MD-21/D-21 combination as having the SR-71 as the mother, whereas it was, as I have said, a modified A-12. The Italeri YF-12A kit is pretty accurate. As one acute critic of the various 1/72 Blackbird kits has noted they all have a pronounced fictitious sag underneath the rear portion (of the fuselage) resembling a full nappy, and this would require an inordinate amount of effort to rectify.

A few years back I built an Italeri SR-71, modifying the forward chine to the correct plan form. But how to build an A-12? The answer came from far, far away, New Zealand in fact.. I discovered that Kiwi Resin Models, a one man operation that has now moved into short run plastic injection moulded kits, manufactured a resin conversion kit for the Italeri MD-21/D-21, to produce an A-12 and an improved D-21. The kit contains a small but appropriate number of parts. When mine arrived, although the parts were well packed, it was clear that the upper portion of the new forward fuselage had become flattened and that it would need work to restore the correct cross section. I tried the softening in hot water trick but that didn't do the job. However I had bought a full complement of Eduard etch for the SR-71, which contains bulkheads, which were easier to fit into the conversion nose than the equivalent donor parts, and which I reasoned would indeed restore the correct shape. I should note at this point that the Kiwi conversion has very full typed instructions on A4 sheets, referring by



Assembled replacement nose section with replacement refuelling bay



The line along which the kit nose is separated