## **High Planes Models**

# Gloster E.28/39 Whittle

### Britain's pioneering jet aircraft.

#### Kit No 72018



Sir Frank Whittle's tenacity in the face of officialdom resulted in the design and construction of his innovative W.1 gas turbine engine. The first test turbine was run on 12 April 1937, with the first flight test engine ordered by the Air Ministry on 7 July 1939. The need for an airframe in which to conduct flight tests resulted in a contract to Glosters to design and build a rather small fighter type aircraft, distinguised by a short barrel fuselage with round air intake at the front and tricycle undercarriage. At the end of March 1941, the prototype with serial number W4041, was completed, and initial taxi tests with a non flight rated engine undertaken on 7 April. The following day some short hops were made. After some fine tuning and fitting of the flight engine, the first flight was made in the evening of 15 May 1941 from Cranwell, - total duration 17 minutes. Fifteen further flights were made over the next thirteen days without any problems, but the requirement to fit a different engine - which was late in delivery - meant it was not until February 1942 that testing resumed. A second aircraft was also manufactured and flown with a more powerful engine, and after much testing it was lost during a test flight on 30 July 1943. Testing of the first aircraft continued into early 1945 at least and by mid year it had been retired, earmarked for permanent display as befits such a pioneering piece of technology. Today, the Gloster E.28/39 is on display in the Science Museum at South Kensington.

#### Construction

This replica should present no undue problems if careful parts preparation is undertaken, mainly test fitting and adjusting components as required for a good fit before gluing. With reference to the construction diagram, make up a cockpit floor from plastic card according to the plan. A rear wall can also be attached behind the seat area. Glue the seat to the floor and make a control column from sprue or other material. No detail was available on the instrument panel layout, but it probably incorporated the standard RAF blind flying panel at least.

Temporarily assemble the two fuselage halves and with a round file or other tool ensure the intake is round. Assemble the intake divider, incorporating weight within before gluing. Some trimming may be necessary to fit it snug within the fuselage halves. The floor should mount up against the rear of the intake divider. Assemble fuselage halves. Before the wings are glued together it will be necessary to drill an undercarriage locating hole in the provided supports each side. This hole goes as far forward as possible and about 1mm from the outer edge of the cutout. The best idea may be to fill the area from the inside to obtain a real solid attachment. After the holes are drilled the support pieces can be cut back to a smaller (and equal) size. The wheel wells can also be boxed in. Glue top and bottom wings together and join to fuselage. Next add tail units, cut main gear doors down the centre and attach, incorporate main undercarriage units, and drill a hole for the nose gear and glue this in with Super Glue. Add the small underfuselage intake, and trim and fit canopy.

