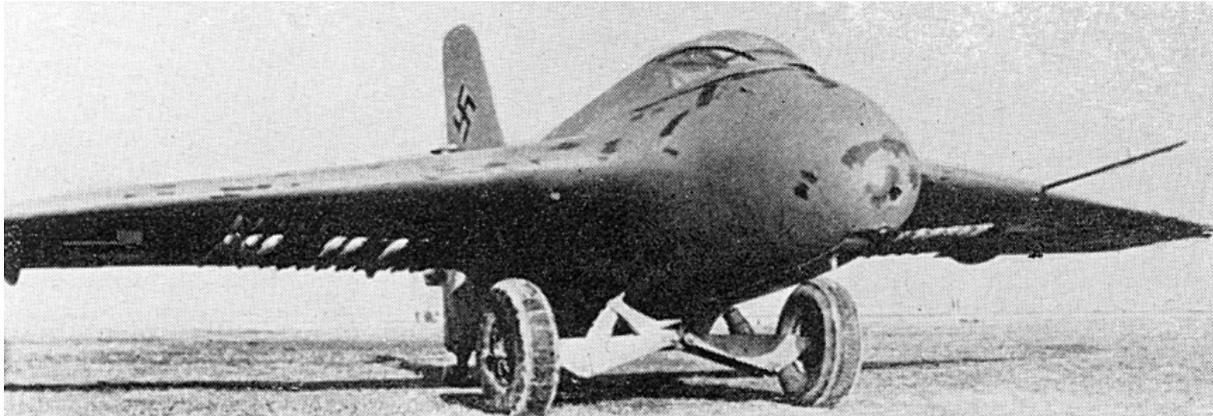


# Messerschmitt Me163V-1

**History:** The Messerschmitt Me163 was the result of two separate technologies coming together to create a new kind of weapons system. Although the system had great potential its complexities, along with the accidents of history, meant that promise was never realised.

After its defeat in World War I Germany was prohibited from manufacturing powered aeroplanes so many of its best and most innovative designers turned to gliders. During the 1920s one of them, Alexander Lippisch, specialised in flying wing designs and had, by the mid 1930s, produced many designs for powered and unpowered aeroplanes which were usually tailless types. Also in the 1930s a young engineer, Helmuth Walter, began development of ordnance rockets and, by 1937, was working on the problem of applying rocket motors to aeroplanes. Most of this work was for rockets to aid take-off of overweight aeroplanes but he also developed a bi-fuel motor as the primary power source for aeroplanes which was tested in a variety of aeroplanes including the specially designed Heinkel He176 which flew for the first time on 20 June 1939.



A Messerschmitt Me163V test fitted with R4M missiles in February 1945

In 1938 Lippisch was approached to study the application of Walter's rocket motor to a test aeroplane which was initially known as the DFS 194. At the end of 1938 the project was transferred to Messerschmitt and in summer 1939 the work was moved to Peenemunde-West. Although engine tests commenced in October 1939 no powered flights were made but approval was given for construction of three development prototypes, initially known as Lippisch P01 V-1, V-2 and V-3 but later officially designated Messerschmitt Me163V-1 to V-3. The project attracted the attention of senior Luftwaffe officials but German military successes in the first months of the war led to many promising projects being slowed down, although two more prototypes were ordered. The Me163V-1 flew for the first time without its engine in early 1941 and achieved a speed of 528mph in a dive. It made its first powered flight on 13 August 1941 and achieved several flights of over 500mph. The speed these little aeroplanes could reach was limited by their small fuel supply, most of which was used in taking off, so a special flight was made in which the Me163V-3 was towed to 13 000 feet and then reached 623.85mph before the pilot temporarily lost control as it approached the sound barrier.

As a direct result of this flight the Luftwaffe took new interest in the project and ordered 70 Me163B interceptors. Work on them started in 1942 but the earlier Me163s were used as testbeds and for pilot training. In 1945 one of them was still in use as a test aeroplane for R4M air-to-air rocket trials. In 1943 strained relations between Willy Messerschmitt and Alexander Lippisch ended with Lippisch moving to Vienna where he developed several novel concepts, many of them even more amazing than the Me163 but none of them reached production.

**Data:** Engine one Walter HWK RII-203b rocket motor of 750kg (1 653lb) thrust. Wing span 9.3m. Length 5.82m. Maximum speed 915km/h. Crew one.

**The kit: CONDOR 1/72**

First, a little comment about designations. This aeroplane is usually referred to as the Messerschmitt Me163A but it seems to me that this may not be correct. There were probably six Me163 prototypes of this kind designated Me163V-1 through to Me163V-6. There were also ten motorless gliders produced for pilot training that probably looked the same and were designated Me163As. So it is likely that this kit, which gives marking for two aeroplanes, is for the Me163V-1 and the Me163V-6, not the Me163A.



This is a little and fairly simple kit that doesn't require many parts. There are, in fact, 44 plastic parts and a brass fret containing some additional bits but 26 of them are the tiny R4M rockets and their racks so the V-1 version only uses 18 parts. It

is not an expensive kit (\$8 from the hands of Mr NKR himself) and it is well crafted so it is really quite good value for money. As we have come to expect from manufacturers such as *Condor*, this limited-run kit is well planned out, nicely moulded and all the parts fit reasonably well. There is plenty of detail for the cockpit (and a nice diagram on the rear of the box shows you what it should look like) but the opening is so small that you would only be able to see it if you left the canopy open.

There are the usual things that you need to do with a kit of this kind. The wing leading and trailing edges need to be thinned, as does the trailing edge of the tail particularly below the exhaust pipe. After that the control surfaces need to be rescribed. The kit does not come with the landing skid extended so it has to be made up with the take-off trolley which involves the use of a couple of brass bits bent to the correct shape and superglued in place. To my eye (and using the photo of the Me163V-6) the trolley seemed to be a bit high so I trimmed it a little so it has the right looking sit. The long pitot tube extending from the port wing was a bit thick so I replaced it with a pin cut to the correct length. The brass detail bits include two teeny-weeny actuators for the rudder but they both disappeared into the carpet. Such is life.

As for painting, nothing could be simpler thought the instructions are confusing. The Me163V-1 is all-over grey and the instructions recommend Humbrol 92 as the correct colour, but that is far too dark. The instruction sheet also suggests that the FS colour equivalent is 36280 which is a much lighter shade than Humbrol 92. After a bit of thought I decided to use FS 36270 which is a touch lighter again and doesn't look too bad. After that I used a bit of silver decal for the landing skid, and that's it. The markings on the decal sheet look a bit big to me but the decals are otherwise good and go on well. I also used swastikas from the spares box rather than the odd shaped things on the decal sheet. The end result is a pretty little model.