THE DEVELOPMENT OF GERMANYS WEAPON THAT COULD HAVE CHANGED THE OUTCOME OF THE WAR AND WHY IT DIDN'T

THE MESSERSCHMITT ME-262 JET-POWERED FIGHTER

THE WORLDS FIRST OPERATIONAL TURBOJET AIRCRAFT

IF THEY KNEW WHAT THEY HAD – THE WORLD MIGHT BE DIFFERENT

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ME-262

Much information concerning Germany's early Jet propulsion (videos) is available at the links shown below. To view, copy and paste the below links into your browser

http://www.2worldwar2.com/me-262.htm

http://www.youtube.com/watch?v=nHXFbmUcfo4

THE BELOW LINK SHOWS THE AREAS USED TO PRODUCE THESE JETS AS THEY APPEAR TODAY

http://thirdreichruins.com/thuringen.htm

The Me 262 was the world's first operational jet fighter. It was also the best of its generation, with an advanced aerodynamic design. Its development was much delayed, less by political disagreement than by engine troubles, and the Me 262 arrived too late to influence the end of WWII. Even the series aircraft had extremely unreliable and short-lived engines. The few Me 262 used in combat demonstrated their clear superiority but were unable to achieve much more. Around 1430 were built but only about 300 were ever ready for combat.

Underground production facility

HISTORY

Being the first jet fighter to enter operational service, the design of the Messerschmitt Me 262 stemmed from a previous 1938 requirement from the German Air Ministry, for a plane to be powered by the new BMW gas turbine engines.

The airframe design was produced by Dr. Woldemar Voigt. The design was for a low-wing monoplane with a slight sweep on the wing leading edge.

The prototype Me 262 airframe was finished well before its jet engines. BMW had numerous problems with this novel form of propulsion. For this reason, the prototype made its first flight on 18 April 1941 with a conventional Junkers Jumo 210 G piston engine mounted in the nose. By November 1941, the BMW 003 engines were ready for installation into the 262 airframe. On 25 March 1942, a Me 262 prototype took off under the power of a Jumo 210 piston engine and two of the jet engines. The inclusion of the piston engine proved to be a wise decision considering that shortly after take-off, both jet engines failed one after the other due to compressor blade failures, leaving the pilot, Fritz Wendel, to land the aircraft solely under the power of the 'old' propeller.

Under Ground Production

Further development was continued but with the use of the new Junkers Jumo 004 Turbojet engine. This new engine was more reliable, producing 2,200 pounds of thrust. This enabled Fritz Wendel to take off for the first time solely by jet power on 18 July 1942.

The new jet aircraft proved to be much faster than conventional airplanes but development problems, Allied bombings, and cautious Luftwaffe leadership contributed to delays in quantity production. In late 1943, Adolf Hitler agreed to put the Me 262 into mass production but insisted (with great reservations from Generalleutnant Adolf Galland, Göring and Messerschmitt) that the Me 262 be configured as a bomber rather than a fighter.

Contrary to Hitler's orders, the Me 262 was exclusively produced as a fighter but when this was discovered by the Führer, an immediate conversion of all planes was ordered, thus ending all hopes of repelling the punishing Allied bombing raids for the sake of dropping one or two bombs. (one of Hitler's major errors)

The Me 262 was argued to be an excellent opportunity to inflict serious damage to the Allied bomber formations as it had already produced superb results against Allied aircraft and it used diesel fuel which was in less demand compared with the high-octane fuel used by propeller-driven aircraft.

The Allied bombing raids destroyed hundreds of Me 262s on the ground whilst they were being converted from fighters to bombers or were unable to fly due to lack of fuel, spare parts, or trained pilots. Therefore, the ME-262 did not get to reach its full potential. More than 1,400 Me 262s were produced but fewer than 300 ever saw combat

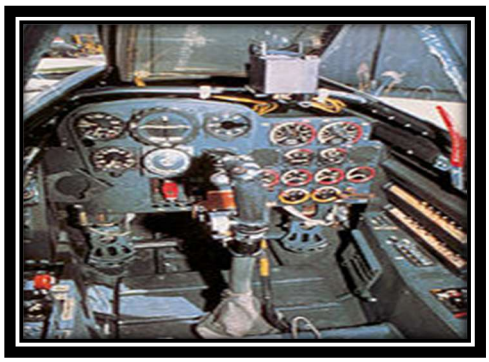
DEVELOPMENT

Although often viewed as a last-ditch super-weapon, the Me 262 was already being developed as project P.1065 before the start of WWII. Plans were first drawn up in April 1939, and the original design was very similar to the plane that would eventually enter service. The progression of the original design into service was delayed by a lack of funds, many high-ranking officials thought that the war could easily be won with conventional aircraft, and therefore most of the available government funds were used for the production of other aircraft.

The Nighthawk Version

Swept wings had been proposed as early as 1935 by Adolph Busemann, and Willy Messerschmitt had researched the topic from 1940. In April 1941, he proposed to fit a 35° swept wing (Pfeilflügel II) to the Me 262. Though this suggestion was not implemented, he continued with the projected HG II and HG III high-speed derivatives of the Me 262 in 1944, which were designed with a 35° and 45° wing sweep respectively. The production Me 262 had a leading edge sweep of 18.5° primarily to properly position the center of lift relative to the center of mass and not for the aerodynamic benefit of increasing the critical Mach number of the wing (the sweep was too slight to achieve any significant advantage). The aircraft was originally designed as a tail-dragger which it was built as in the first (Me 262 V1) through fourth (-V4) prototypes, but it was discovered on an early test run that the engines and wings "blanked" the stabilizers, giving almost no control on the ground. Changing to a tricycle landing gear arrangement, firstly as a fixed undercarriage on the fifth prototype aircraft, then a fully retractable one on the sixth and succeeding prototypes, corrected all of these problems immediately.

The first test flights began in April 1941, but since the BMW 003 turbojets were not ready for fitting, a conventional Junkers Jumo 210 engine was mounted in the nose, driving a propeller, to test the Me 262 V1 airframe. When the BMW 003 engines were finally installed the Jumo was retained for safety which proved wise as both 003s failed during the first flight and the pilot had to land using the nose-mounted engine alone.



ME-262 Cockpit

The V3 third prototype airframe became a true jet plane when it flew on July 18, 1942, in Leipheim near Günzburg, Germany, piloted by Fritz Wendel. The 003 engines which were proving unreliable were replaced by the newly available Junkers Jumo 004.

The Jumo 004 was more reliable, but it also caused problems since the Me 262 had to compete with the Arado Ar 234 for the engines.

Test flights continued over the next year but the engines continued to be unreliable. The production of the aircraft was slowed mainly by engine troubles. An order from Hitler that the new Me 262 must also be part bomber played little part in comparison. Although airframe modifications were complete by 1942, production never began until 1944 when the production engines -- which due to the shortage of strategic materials like tungsten and chromium had to be completely redesigned to employ alloys of inferior temperature resistance -- finally started to work.

Jet engines have less thrust at low speed than piston or turboprop engines and due to this, acceleration is relatively poor. It was more noticeable for the Me 262 because all early jet engines (before the invention of afterburners) responded slowly to throttle changes. The introduction of a primitive auto throttle late in the war only helped slightly. Conversely, the higher power of jet engines at higher speeds meant the Me 262 enjoyed a much higher climb speed. Used tactically, this gave the jet fighter an even greater speed advantage than level flight at top speed.

Messerschmitt Me 262 at the Smithsonian

Operationally, the Me 262 had an endurance of 60 to 90 minutes.

ANOTHER SUMMARY

Developed from a 1938 design by the Messerschmitt company, the Me 262 "Schwalbe," ("Swallow") was the world's first operational turbojet aircraft. First flown as a pure jet on July 18, 1942, it proved much faster than conventional airplanes. Development problems, Allied bombings, and cautious Luftwaffe leadership contributed to delays in quantity production. In late 1943, Adolf Hitler agreed to mass production but insisted the aircraft be used primarily as a fighter bomber. On July 25, 1944, a Me 262 became the first jet airplane used in combat when it attacked a British photo-reconnaissance Mosquito flying over Munich. As a fighter, the German jet scored heavily against Allied bomber formations. The bombers, however, destroyed hundreds of Me 262s on the ground. More than 1,400 Me 262s were produced, but fewer than 300 saw combat. Most remained on the ground awaiting conversion to bombers, or were unable to fly because of lack of fuel, spare parts, or trained pilots.

PERSONAL COMMENTS

During the many, many hours I have spent researching the events in WW2 I'd like to say that this article is typical of the developments and accomplishments of Germany.

Starting in the 1930 Germany had developed and improved on many mega and secret weapons that we were not able at that time to duplicate. Their expertise in pioneering the use of jet propulsion put them many years ahead of the US. They developed and flew a flying wing many years before the United States did so.

Practically all of the items I have researched on Germany's capabilities express the same opinion. The authorities in Germany at that time just didn't think further development of these discoveries was significant. The biggest offense America had was the fact that so much mismanagement was so prevalent among their leaders.

Hitler chose not to develop many of the advancements that Germany had made because he thought the war would be "over quickly" so there was no need for them. He did not listen to what his many accomplished scientists presented to him.

An example of this is shown in this article. The Messerschmitt ME-262 was designed to be used and proved its ability as a jet fighter, but Hitler wanted it to be a Fighter/Bomber which changed the engineering requirements considerably and greatly contributed it delay in production and limited use in WW2.

We can only hope that the world never sees another person with the power, capability, support, and evil that this man had.

PLEASE UNDERSTAND THAT EVEN THOUGH THIS INFORMATION HAS BEEN TAKEN FROM WEBSITES THAT APPEAR TO BE AUTHENTIC, I CAN NOT ENSURE THAT ALL THE DATA IN THIS ARTICLE IS ACCURATE AND CORRECT