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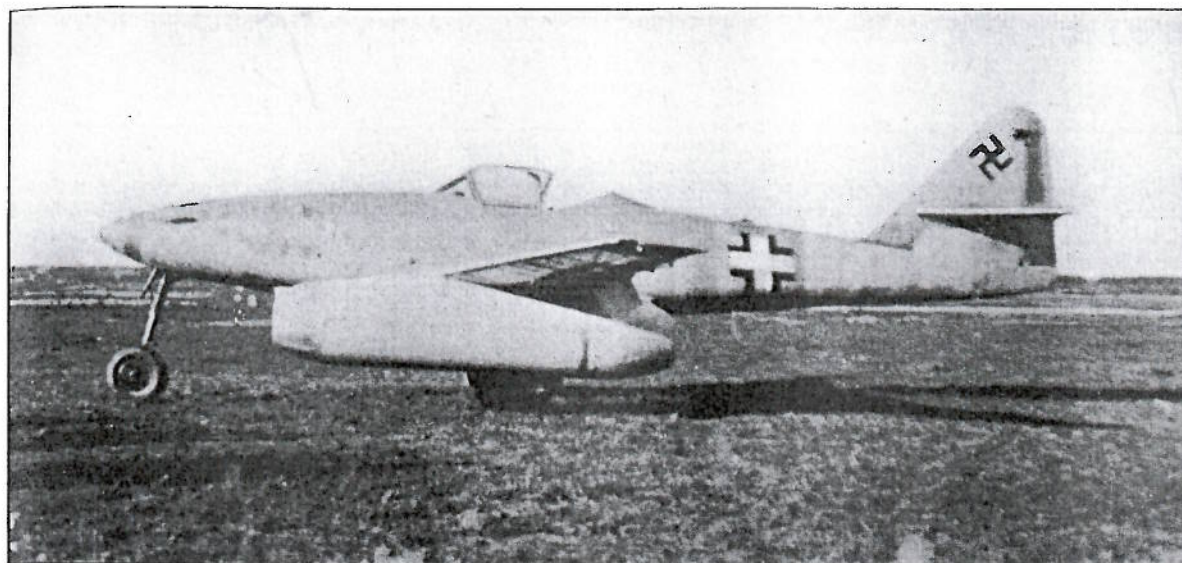
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Me-262 RECEIVED INTACT

**A Civilian Test Pilot Flew This New Specimen
To Frankfurt/Rhein-Main and Surrendered It**

FIRST Me-262 to be acquired intact by the Allies, the newly completed aircraft pictured above was presented to US Air Technical officers at the end of its first test flight. The pilot lost no time in bringing it across the front lines and making a perfect landing at the big former GAF base near Frankfurt. He co-operated further in providing a wealth of information concerning starting, flying, and landing procedure, as well as in mentioning several useful details not immediately apparent from examination.

Generally speaking, the information available on the Me-262 from crashed specimens and from other sources was fairly complete before this specimen was "delivered." The report by USSTAF Technical Intelligence, however, will be treated in some detail in this article; comparisons may be made by referring to previous articles in the SUMMARY, particularly that in No. 60 (page 11).

Designation and Design: This aircraft is officially known as the Me-262A-1. The aircraft had not been painted, and its only markings were the German crosses on wings and fuselage, and Swastika on the fin.

The design is extremely clean, but does not present any startling innovations in airframe structure. It is, of course, designed for higher than usual fighter speeds. The skin is somewhat heavier than that of an Me-109. The cockpit is very simply laid out, and according to the test pilot any Me-109 pilot can be checked out in the Me-262 after only about one hour's instruction.

Other than the power units, the only unusual features observed were the fact that the slots extend along the entire leading edge of the wing, even between the nacelles and fuselage. The nose wheel has a brake operated by a pull handle in the cockpit. The undercarriage struts are short, as is usual in jet aircraft. The flaps, however, are of a slotted type, mounted on a compound linkage so as to extend rearward as they are lowered, producing the slot opening and simultaneously increasing the effective chord of the wing. They will depress to a 50° angle, and are used at full extension for landing.

Principal Dimensions of the Me-262, as derived from measurement of the new specimen, are as follows:

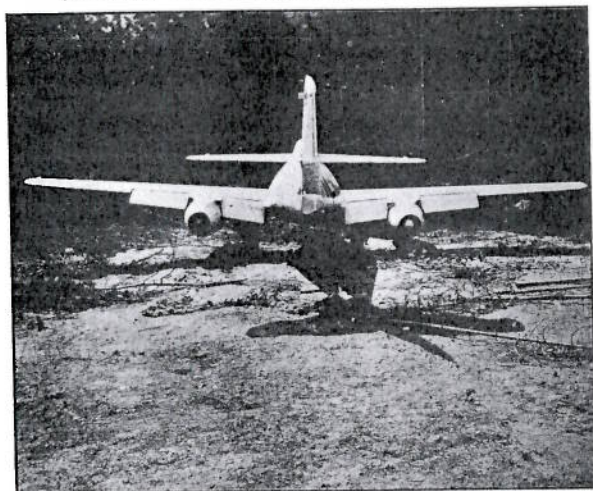
Wing Span	...	...	40 feet, 11 1/2 inches
Length	...	...	34 feet, 9 inches
Height of Fin above ground	...	...	11 feet, 4 inches
Wing Root Chord	...	...	8 feet, 4 inches
Wing Tip Chord	...	...	2 feet, 9 3/4 inches

Power Units are Jumo 004s, with the designation "B-1" added. The two units fitted on this aircraft had been tested on 5 and 14 February, respectively. They bear works numbers 244 units apart, and both were made in a plant designated "SLF."

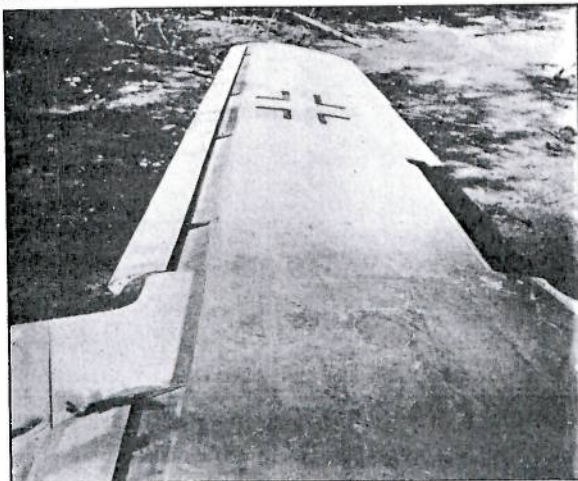
Armament: As expected, the new specimen has four MK 108s in the nose of the fuselage. According to the ammunition boxes, the top cannons carry 100 rounds each, the bottom pair 80 each. All of them fire simultaneously, and are standard models, air-cooled and electrically fired (SUMMARY No. 42,



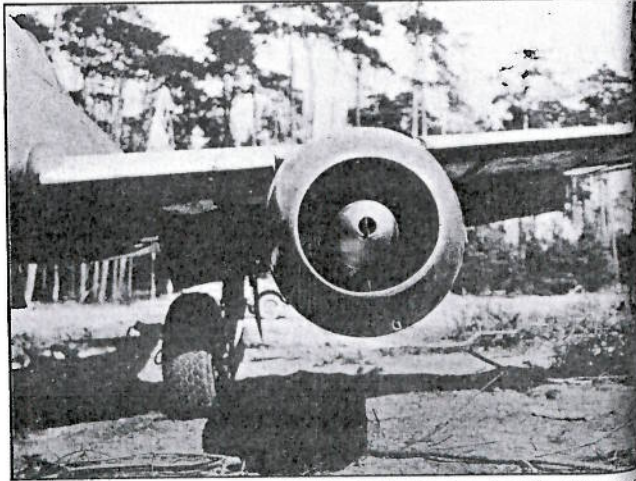
HEAD-ON AND THREE-QUARTER VIEWS OF THE Me-262 GIVE A GOOD IMPRESSION OF ITS SIZE AND FEATURES



REAR VIEW OF THE PLANE, SHOWING FLAP ARRANGEMENT



PILOT'S VIEW OF WING, SHOWING EXTENSION SLOTS



CLOSE-UP PHOTO OF FORWARD INTAKE OF JUMO 004 JET

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page 18). The only sight installed is a Revi 16B adapted to be turned and pushed forward out of the pilot's field of vision when not required.

Bomb Racks : As can be seen from the photographs, the bomb racks are streamlined, and appear to have been specially constructed for the Me-262. It will be of interest to compare the photo of this equipment with those of the bomb racks of the Me-262 which crash-landed inside the Allied lines in January (SUMMARY No. 63, page 11).

The forward ends of the racks are approximately in line with the leading edge of the power units. Maximum carrying capacity of the racks, according to lettering on the underside of the fuselage, is 500 kg. Based on allowable weights as given in documents, the indicated maximum load would be 1,000 kg. The Me-262 has a standard bomb fusing control box,

Me-262's SPEC



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located below the instrument panel. According to the test pilot, maximum operational bomb load is either two 250-kg. or one 500-kg. bombs.

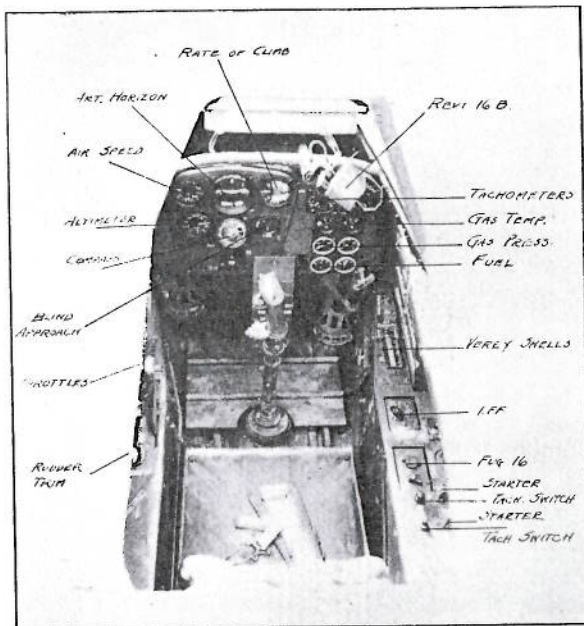
Armor : The pilot's armor protection consists of a 16-mm. bulkhead at the forward end of the cockpit, constructed in four sections as shown in the drawing at lower right, plus, for frontal protection, a heated bulletproof windshield 3.5 inches thick. Behind the pilot is fitted a head-and-shoulder plate, as illustrated. The seat is not armored, nor is there any side or bottom protection for the pilot. Cockpit canopy is jettisonable, but there is no ejection device for throwing the pilot clear.

Fuel Tankage : Full capacity is 2,000 liters (530 gallons), carried in two main tanks of 900 liters each. One of these is forward of the cockpit, the other just behind. Beneath the pilot there is an auxiliary tank carrying about 200 liters. Oil tank has a capacity of 7.5 liters (about two gallons).

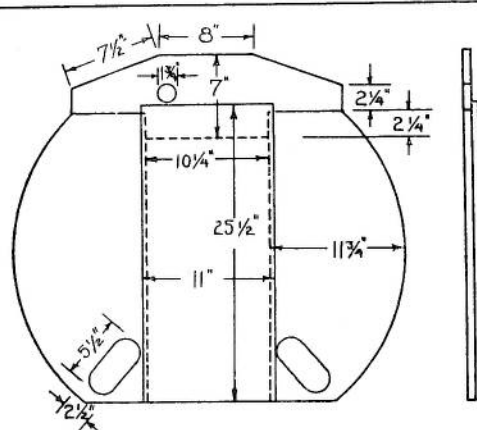
Instruments and Gauges : The flight instruments on this specimen are standard, and their layout is shown in the photograph of the cockpit. The air speed indicator is redlined at 950 k.p.h. (590 m.p.h.).

The power plant instruments comprise the following: (1) two tachometers of a two-speed variety, reading from zero to 3,000 r.p.m. and from 2,000 to 15,000 r.p.m., and they are redlined at 8,900 r.p.m.; (2) Two gas pressure gauges indicating up to 1 kg./cm.²; (3) Two gas temperature gauges indicating temperatures up to 1,000° Centigrade, and having marks at 680°; (4) Two oil pressure gauges; (5) Two fuel injection pump pressure gauges, marked at 65 kg./cm.²; and (6) Fuel gauges for front and rear main tanks.

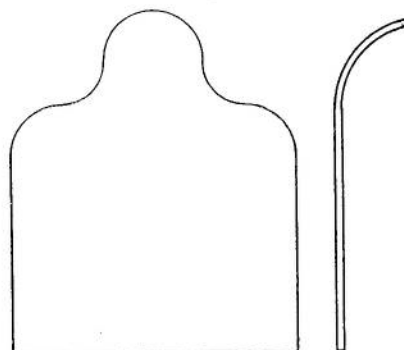
Controls: Located on the left side of the panel are the emergency valves for flaps and undercarriage as well as oxygen flow indicator and oxygen pressure



ANNOTATED PHOTOGRAPH OF Me-262 COCKPIT LAYOUT

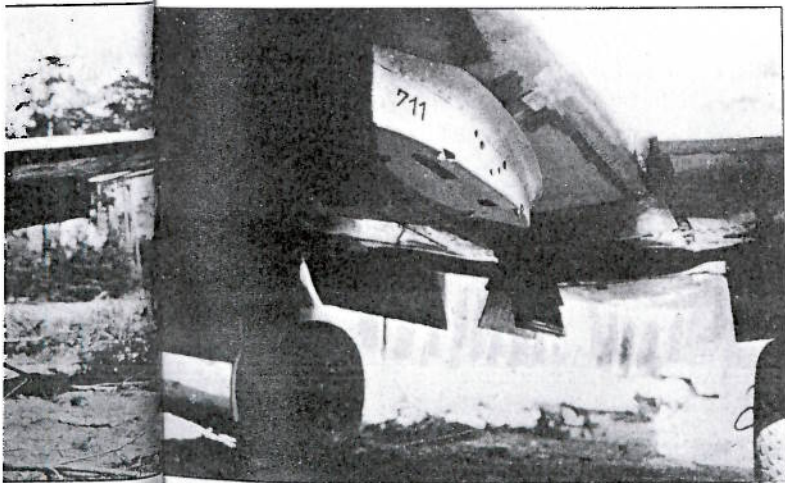


16 MM FRONTAL ARMOR



16 MM REAR ARMOR

SKETCH SHOWS BULKHEAD AND PILOT'S ARMOR



JUMO 004 JET Me-262's SPECIALLY DESIGNED STREAMLINED BOMB RACK

gauges. There is no provision for de-icing the wings.

At the pilot's left are two throttles with stops to prevent accidental full closing and consequent stalling of the units.

There are fuel selector valves, and an emergency master cutoff switch is provided.

Horizontal stabilizer can be trimmed by a control, and also has an indicator in the cockpit. Angle of incidence of the stabilizer is varied by an electric motor to trim the aircraft. The rudder is trimmed by a tab controlled by a small crank on the pilot's left.

On the right side of the cockpit are located several other controls. These are: the Pitot heater switch, switches for firing Verey signals, and the various radio switches and knobs. Also on the right are the switches for the starting motors, and others to select low speed indication on the tachometers.

Other Equipment: Radio equipment is, as was expected, the standard FuG 25A and FuG 16ZY.

Standard type oxygen apparatus is installed, including three tri-globular bottles. These, along with the radio sets, are located in the after part of the fuselage behind the rear fuel tank.

Tire sizes for the main wheels are 840 by 300 mm., and for the nose wheel 660 by 160 mm. Brakes for the main wheels are operated by the usual pedals, and the nose wheel brakes, as mentioned, by a handle to the left of the panel.

THE following paragraphs include the main points concerning operation of the Me-262, provided by the civilian pilot who brought the new plane to Frankfurt.

Starting Procedure: After switching engines on, the starter switch is pulled up and held for two seconds, after which the buttons are pressed putting the low-speed r.p.m. indicator in action. When the power units have reached 700 r.p.m., buttons on right side of throttles are pressed and held until a deep throbbing noise is heard.

If the units do not start, the throttle button is released and power units are cleaned of injected fuel before repeating the initial procedures. When the jet units start firing, r.p.m. will increase rapidly to somewhere between 1,800 and 2,000 at which point the starter switch is released, the fuel switch is opened and the fuel pump turned on.

Throttles are opened gradually, and when a speed of 3,000 r.p.m. is reached, the low-speed tachometer button is released at the same time as the starting fuel button. The unit is by this time operating on its J-2 fuel, derived from lignite. (Preliminary operation is on a benzine-benzol mixture, or gasoline. The small two-cycle starting engine uses gasoline mixed with three to four percent of lubricating oil—much like an outboard motorboat engine.)

Cockpit Check: Speed of the jet units is increased to 7,000 r.p.m.; between this point and 8,400 r.p.m.,

the cone valves in the jet orifices should move rearward to their fully extended position. This position is visible from the cockpit, and indicates that maximum thrust is being developed.

Gas temperature is checked to see that it does not exceed 740° C. Fuel pump pressure gauges are checked to see that pressure is between 50 and 80 kg./cm².

Finally, front fuel tank feed is switched to the port unit, and the rear tank feed to the starboard unit.

Taxiing: Caution must be exercised in taxiing, according to the test pilot, because the rudder is ineffective on the ground, and steering by thrust is difficult because of the low thrust built up at first. Caution is observed lest the tail be turned toward, and too close to, inflammable objects.

Takeoff: The test pilot prisoner stated that a 1,000-meter (1,100-yard) hard-surfaced runway is sufficient for takeoff. If a turf runway is used, 1,500 meters' length is needed (about 1,650 yards). Flaps are set at 20°, with trim at zero or 1 on the indicator. The aircraft should be held with the main wheel brakes, and the throttles opened slowly until both power units indicate 7,000 r.p.m. Brakes are then released and throttles opened fully. After about 250 yards, the pilot pulls gently back on the stick and raises the nose wheel.

Flight: It is necessary to keep checking fuel pump pressure to see that it is held equal for both jets.

When the stick is in neutral position, lateral trim and ailerons should not be more than 10 mm. out.

At full throttle, the flyer said, the Me-262 should do 830 k.p.h. (516 m.p.h.) at altitude 500 meters (1,650 feet). In climbing or turning, the slots should open when speed drops to 450 k.p.h. (280 m.p.h.).

Depending on speed and altitude, the Me-262 has a duration in flight of 50 to 90 minutes, using full 2,000-liter fuel capacity.

Landing: Landing gear is lowered at a speed between 350 and 400 k.p.h. It may be expected, the pilot said, that the nose of the plane will rise sharply as the nose wheel is lowered, but once the wheel has dropped the aircraft will resume normal attitude.

The aircraft should be carefully retrimmed after the landing gear is down. Approach should be made at 250 k.p.h. (155 m.p.h.), and the ship should be stalled out between 112 and 125 m.p.h.

The test pilot stated that a landing run of 1,100 yards is required; he did not specify whether this figure took into account a hard or turf surface.

Stopping Engines is accomplished by first closing the throttles completely and pressing the ignition buttons. Fuel pumps are then switched off and the fuel lines closed. In the event that the power units start to burn, starter switches should be pulled, re-igniting the units, after which it is safe to repeat the shutting down procedure.

VIRTUALLY a new jet-prop No. 74 (page 162) on the basis of further information from the airfield at Schwechat. The current information is believed that the He-177 is visionally described in the Air Technical

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Classification changed to

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Authority of ACFTS, G-2, WDGS

by *Ray M. Stroupe*

RAY M. STROUPE
1st Lt. Inf
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SUMMARY No. 75**

For Week Ending 15 April, 1945

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