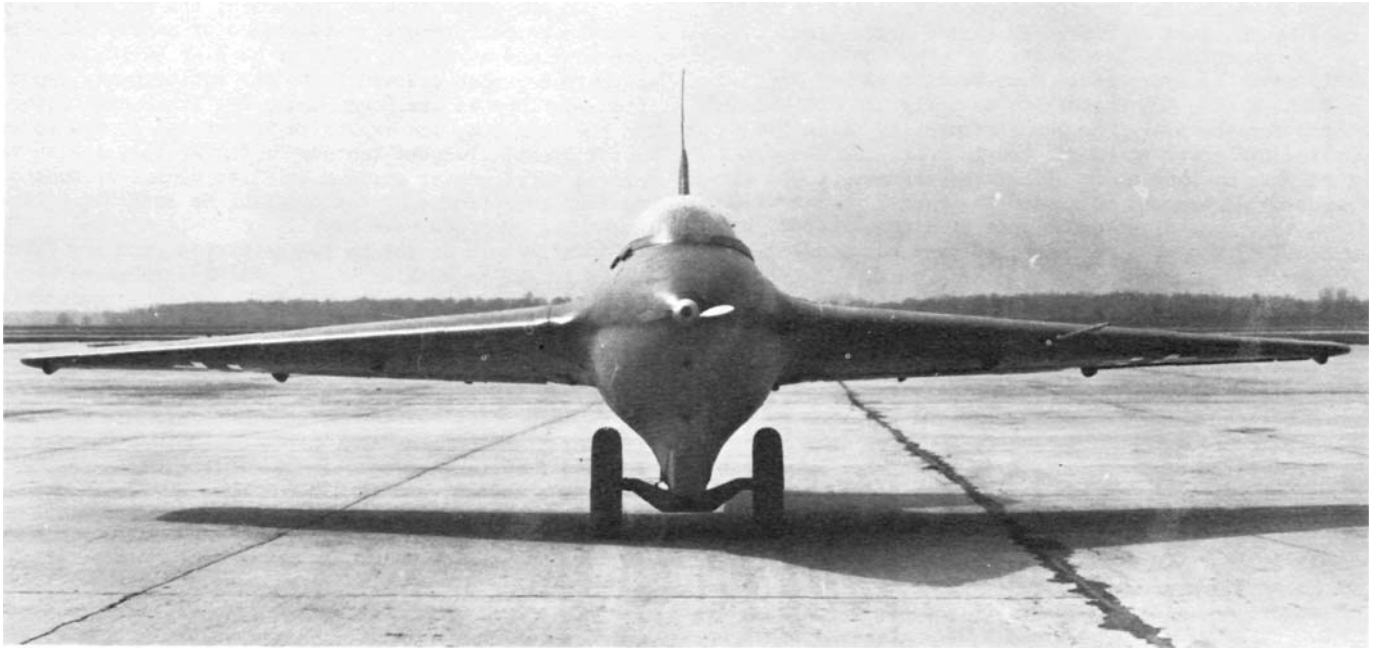




THE GERMAN JETS and the U.S. ARMY AIR FORCE

BY KENN C. RUST and WILLIAM N. HESS

In the clear, still air of the morning of the 27th of August 1939 an airplane rolled down the airfield at Marienehe, near Rostock in Germany, accompanied by a shrill, whistling sound. When it had gained speed it lifted off the ground to open a new era--the first airplane to fly on the power of a turbojet propulsion unit was in the air. This was the Heinkel He 178, a small research plane powered by a Heinkel-Hirth He S 3B jet engine which developed a maximum thrust of 1102 pounds.

Work on jet engines had first begun at the Heinkel-Hirth Company in 1937 and had progressed in two years to the He S 3 model composed of both an axial and centrifugal compressor. With the outbreak of war, and a subsidy from the Reichluftministerium (German Air Ministry), an advanced model engine was soon begun, the He S 8. With a diameter of just over 30 inches, it produced a thrust of 1488 pounds in 1941 and received the R.L.M. designation of 109-001.

Meanwhile, the success of the He 178 stirred no interest within the Reichluftministerium, but it led the Ernst Heinkel Works to the design of a military fighter type of stupendous promise. Designated the He 280, the new aircraft was a lightweight (just over three and a half tons, empty), twin engine, jet propelled fighter plane with a tricycle landing gear and an ejection seat for the pilot. Although the He S 8 jet engines were not perfected, they powered the He 280 prototype on its first flight which took place 2 April 1941.

Further testing of the He 280 proved it to be a first-class fighter aircraft with a speed of 500 miles per hour. Improved He S 8A engines of 1543 pounds thrust were installed by 1942, and its effectiveness was conclusively shown during comparative tests with a

Focke Wulf FW 190. The He 280 completely outperformed the Luftwaffe's best single engine fighter showing itself to be highly maneuverable and with a speed now well over 500 miles per hour.

After the first test flights of the He 280, Ernst Udet, head of aircraft production and materiel for the Luftwaffe, was won over to the design and was prepared to back its production and early entrance into combat. This policy, if followed, would have led to the Luftwaffe being equipped with jet fighters by the middle of 1943, but events soon transpired which were to negate all such possibilities.

Seven months after the first flight of the He 280, Ernst Udet committed suicide. This allowed Field Marshal Erhard Milch (Inspector General of the Luftwaffe) to take complete control of aircraft selection, production and planning for the German Air Force, and he proceeded to turn deaf ears on any mention of the He 280. That he could succeed in such a short sighted policy was aided by the low level of development of the jet engines then available.

The He S 8 engine, with which the He 280 was first powered, had enough bugs in it so that the original flights of the jet fighter were made with the engines uncowed. This was necessitated when fuel leaked into the bottoms of the cowls during engine use and created a severe fire hazard. The He S 8A engine, however, appeared to be at a state of development much nearer mass production, yet in June 1942 it was superseded as a power plant for the He 280 by the Junkers Jumo 109-004 engine. Work on this engine, following the official policy established in 1940 that all development requiring more than six months to complete be abandoned, had proceeded at such a low priority that by 1942 it still

needed a great deal more development time before it would be reliable or ready for series production.

A concentrated development program instituted in early 1942, however, could have brought either the He S 8A or Jumo 004 engines to an early production status for the proven He 280 airframe, if Milch had applied his power to Udet's convictions. In the event, Milch gave no backing to either the engines or the airframe and so brought to an end the career of the He 280. Altogether some eight prototypes were constructed, but by mid-1943 the last of these had been scrapped.

Without the great lead the Heinkel He 280 would have given the Luftwaffe in the realm of high speed, jet fighters, there was still an excellent chance for the Luftwaffe to get a good jump on the Allies in this new field. The chance lay in two different aircraft being worked up by the Messerschmitt A. G.—the Me 163 and the Me 262.

The first of these came into being when Professor Alexander Lippisch and his design team joined the Messerschmitt company at the beginning of 1939. They brought with them the basic plan for a flying wing, research aircraft that would be powered by a rocket motor. The machine known as the DFS 194 was completed at Messerschmitt and flew for the first time in the Spring of 1940. It showed so much promise that work was begun on two much more powerful prototypes to be known as Messerschmitt Me 163s. The first of these flew in August of 1941 attaining a speed of 570 miles per hour from a standing start and, later, a speed of 623.85 miles per hour following an air drop in October 1941.

Such outstanding performance by the Me 163 prompted the R.L.M. to order the type prepared for production as a high performance interceptor. Work immediately began on the production airframe and a new rocket motor with controllable thrust and greater reliability. The airframes were soon ready, but the motor was a different matter. Severe design problems appeared and required a considerable amount of time to overcome, so that it was September of 1942 before the first new rocket motor was ready for test in the airframe. After testing began further problems had to be solved, and it was not until mid-1943 that a test group could begin the first steps in readying the Me 163B for operational use with its new Walter HWK 109-509 rocket motor of 3750 pounds thrust.

Finally, in June 1944, the Me 163BS (production having been undertaken by Klemm Flugzeug at Boblingen in southwestern Germany) were ready for service use. The first Komets, as the type was named, were delivered during the winter of 1943-44 to Erprobungskommando 16 (Experimental Commando 16) at Bad Zwischenahn with later machines going to a new unit, Jagdgeschwader 400, which had squadrons based at Venlo in Holland and Wittmundhafen. It was later based entirely at Brandis, near Leipzig, beginning operations there in August 1944.

Even as the rocket fighter went into service, however, there were drawbacks to its use. Its motor would only run for a total of five minutes thus greatly cutting down the amount of time it had to intercept enemy aircraft. (Normal operational procedure was to climb the Me 163B to altitude, cut off the motor and glide until enemy aircraft were contacted; then the motor was used for one or more high speed interceptions and a breakaway after which the fighter glided back to a landing ground where it landed on a built-in skid.)

More serious than limited endurance, the rocket motor and its associated, highly explosive fuel were constant sources of danger. On some occasions the rocket motor exploded during the start-up procedure destroying the aircraft and killing or injuring the pilot. The motor also had a habit of not using all of its fuel, and during landings there were a number of incidents of the unused fuel being detonated, the resulting explosion destroying the plane and, invariably, the pilot.

On the other side of the scale, the Me 163B had a tremendous performance, a top speed of nearly 600 miles per hour and a rate of climb of as high as 16,000 feet per minute, that allowed it to far outstrip any opposition—as long as the Komet could use its rocket motor. In the long run, the explosive tendencies of the rocket motor greatly reduced the use of the Me 163, and an improved version never quite made it to combat status to further the efforts of the original Me 163BS of which something over 300 were built.

While work on the Me 163 developed from the first tests to the production stage, the Messerschmitt company devoted its greater attention to the Me 262, twin turbo-jet fighter. Although it was this similar design that survived the He 280 in 1941-42, such was not accomplished on its merits. In the beginning the Me 262 was inferior to its competitor on several counts—it was not as far along its development path, it did not have a tricycle landing gear that alone could keep the jet engines from tearing up the fields from which the machine operated, and it did not have an ejection seat for the pilot. Still the Me 262 held great promise for the Luftwaffe as a combat aircraft.

Messerschmitt had entered the jet aircraft field at the beginning of the war when the R.L.M. gave the company a contract (1 March 1940) to build three prototypes capable of using the just developing turbo-jet engines. Before jet engines were available for it, the first Me 262 flew on 4 April 1941 powered by a 700 hp Jumo piston engine placed in the nose of the single seat, low wing airplane with its twin main wheel and tail wheel landing gear.

By November 1941 the first jet engines reached the Messerschmitt plant. These were Bayerische Motorenwerke BMW 109-003 engines—in 1940 BMW had first concentrated their efforts in the jet engine field on a contra-rotating turbine with axial flux, designated 109-002, which did not work out, and on an axial flow turbo-jet engine which became the 109-003 in 1940. The 003 developed from six compressor stages to seven and was producing about 1100 pounds of thrust when the first examples reached Messerschmitt. Tried out on the piston engined Me 262 airframe, due to their low thrust and poor efficiency, the BMW engines proved unsuitable and were not used again by Messerschmitt. However, BMW continued to modify the 003 until, by 1944, the 003A was giving 1760 pounds thrust. The engine was then earmarked for the Heinkel He 162 Volksjaeger (People's Fighter), an ill-starred creation evolved in the last half of 1944 under the direction of the Chief of the Fighter Staff, Otto K. Sauer. The He 162 was to be a swiftly producible, cheaply built, small jet fighter that could combat the Allied bomber streams under the pilotage of partially trained pilots to be drawn from the Hitler Youth Groups. In the event, both aircraft and project failed miserably although II/J.G. 1 (Second Gruppe of Jagdgeschwader 1) was equipping with the type at the end of the war.

When the BMW engines proved useless to the Me 262, further tests had to await the delivery of the Junkers Jumo 004 jet engines. These arrived in mid-1942, and on 18 July 1942 (15 months after the first flight of the He 280) the Me 262 flew for the first time on jet power alone and finally began to catch up with its one-time rival.

Although developed under a government contract, the Me 262 was receiving little official support, and it was proceeding more as a company sponsored experiment than anything else. When Wily Messerschmitt presented a report on the progress of the Me 262 and asked for further support at the 13 November 1942 Generalluftzeugmeister Development Conference (one of a regular series of conferences headed by Milch after the death of Udet), the intransigent Milch refused to give any support to the jet fighter. He was consumed with plans to increase the production of conventional fighters and bombers in the face of the growing Allied airpower

in the West, and the demands of the Russian and North African fronts.

Late in 1942, or early 1943, a Major Opitz applied for and received permission from Wily Messerschmitt to try out the Jumo powered Me 262. His reaction was one of unqualified enthusiasm. Through him General of the Fighter Arm, Adolf Galland, was led to fly the Me 262 on 22 May 1943. Three days later, Galland reported the following to the head of the Luftwaffe, Reichsmarschall Herman Goering, who until this time had stayed out of the jet picture:

1. The Me 262 is a tremendous stroke of luck for us; it puts us way out in front, provided the enemy continues to utilize piston engined fighters.
2. As far as I could tell, the fuselage seems to be entirely satisfactory.
3. The engines are everything which has been claimed for them, except for their performance during take-off and landing.
4. The aircraft opens up entirely new possibilities as far as tactics are concerned.

As a result of the number of flights that had now been made with the Me 262 by such pilots as Galland, it was finally decided to convert the aircraft to a tri-cycle landing gear--proved necessary to give the pilot better vision, to get the aircraft airborne faster, and to keep the engines from tearing up the operational fields from which the machine would operate. These changes were effected between June and October 1943, so that eighteen months after the He 280 was dropped from favor the Me 262 caught up with it in design particulars.

Of the greatest importance in bringing the Me 262 into operational use was the chain of developments that stemmed from Galland's glowing report to Goering. First, from a meeting conducted by the Chief of Procurement and Supply on 2 June 1943, there came a decision to begin construction on the pre-production Me 262A-0 "because of its superior speed as well as its many other qualities."

When Milch announced a fighter production goal of 4,000 machines per month on 17 August 1943, Galland demanded that 1,000 of them be jet fighters. He suggested that scheduled production of the Me 209 (an improved version of the Bf 109 with an annular radiator that was in competition with the FW 190D) be discontinued in favor of the FW 190D and that production capacity thus freed should be "switched to the Me 262 program". Milch promptly demurred and explained that he could not be expected to stop all other development projects just because of the Me 262--a considerable misstatement in view of the request. He further stated, "...the Fuehrer feels that the risk is too great.... I, personally, would go ahead and produce it, as we had planned, without all this business of discontinuing the Me 209. However, as a soldier I have no choice but to obey orders. If the Fuehrer orders caution, then we must be cautious."

A few days after this, Hitler witnessed a test flight of the Me 262 for the first time. He was immediately won over to the promise of the new aircraft, and on 27 August 1943 the Development Board underwrote the decision for Messerschmitt to prepare for series production of the Me 262.

As production of the jet fighter was finally to begin, there were several factors that would keep the first series' models from early completion. On 17 August 1943, the 8th Air Force attack on Regensburg created heavy damage and loss to the fuselage jigs that had been readied for the production of the Me 262. Additionally, the improved Jumo 004 jet engines for the production fighter were not ready. Not until October would the first of these units, the 109-004B of 1984 pounds thrust, be flying.

Finally there was the matter of poor management at the Messerschmitt company. According to Galland, the Messerschmitt works were too poorly organized to carry

out a large order since they were continually getting into difficulty by failure to meet the small delivery quota they did have. In fact, it was well known by the leaders of the Luftwaffe that Wily Messerschmitt continually made promises of delivery and perfected designs he could not meet. This was forcefully demonstrated in the case of the Me 262 by what soon transpired.

On 2 November 1943, Adolph Hitler took his first active part in the development of the Me 262 by sending Goering to the Messerschmitt plant at Augsburg to broach the question of equipping the jet aircraft to carry bombs. When the question was put to him, Wily Messerschmitt blandly replied that the original plans had always envisioned the installation of two bomb release clips, for either two 550-lb. bombs or a single 1,000-lb. bomb. This equipment and the necessary wiring had not been installed, he continued, because the type was being prepared for mass production.

All this pleasantly surprised Goering. The Fuehrer had wanted to know if the Me 262 could carry two 154-lb. bombs--if it could carry two 550-lb. bombs, so much the better. He then asked how soon the first models, so equipped, would be ready.

Messerschmitt was trapped. He'd tried to hedge his way free of any friction that Goering's visit might develop, but now he had no choice but to admit the truth. The bomb release clips had not yet been designed. Then, hastily, he added that as soon as the design could be finished there would be no difficulty in installing them in the test models.

Aroused, Goering reviewed the situation. "You said that the original plans envisioned the installation of bomb release clips. Surely that must mean you've given the problem some study!"

Messerschmitt could only respond that all the data were included in the appendix to the construction plans, but the Reichsmarschall wanted a more direct answer. He asked how great the delay would be "in case of dire emergency". To this Messerschmitt responded with a statement that defied credulity, "Oh, not very long. Two weeks, perhaps. It isn't really much of a problem, just a matter of camouflaging the clips."

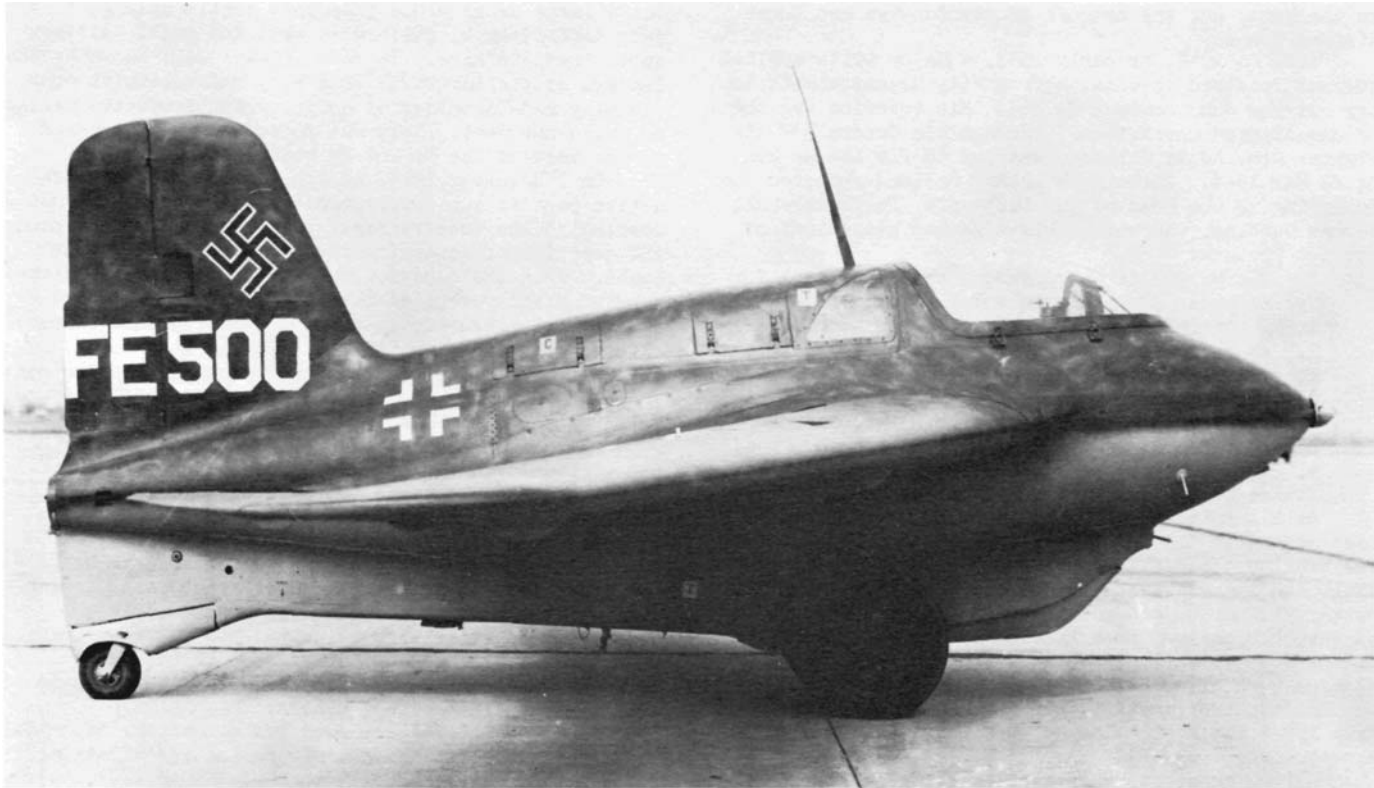
And so the seeds of conflict were planted. The bomb carrying capacity of the Me 262, that didn't exist, had been broached and had been given credence by no less a personage than Messerschmitt himself.

From this point, Goering went on to inquire how many Me 262s were then available for testing, and he received a great shock. Messerschmitt replied that no aircraft were ready for testing from the pre-production series and that only two experimental aircraft were available. Another had been totally destroyed in a crash landing and two had been seriously damaged. From this it became strikingly obvious that the production guidelines needed revision, and as a result a special commission was established under Colonel Edgar Petersen (of the Luftwaffe Proving Ground at Rechlin) to guide the development of the Me 262.

On 12 November, Milch approached Lt. General Vorwald, Chief of Staff of the Technical Department, for his opinion of the machine.

"The one thing we are not yet entirely sure of is the problem of whether the Me 262, with its jet engines, is so foolproof that we can go ahead with production next year. Are we ready, not only in point of development but also in point of production?"

Vorwald responded with a definite, "yes", but Major Siegfried Knemeyer (of the Luftwaffe Proving Ground at Rechlin) warned of the catastrophic situation in the Messerschmitt plant where everything had run into a bottleneck. His view was backed up on 20 November when the Chief of Procurement and Supply, who was seriously concerned at the manpower being requisitioned to work on the fuselage, engines and equipment of the new plane, complained bitterly of the delays in delivery and of the juggling of numbers, dates and deadlines by the Messerschmitt A.G.



Ready for a rocket flight is this Messerschmitt Me 163B-1 with its AAF Test Number. (Photo-USAF 25332)

As a result of these November developments and rumblings, Hitler entered actively into the affair of the Me 262. In a telegram to Reichsmarschall Goering, dated 5 December 1943 and signed by Hitler's Luftwaffe aide, the following was said:

The Fuehrer has called our attention once more to the tremendous importance of the production of jet propelled aircraft for employment as fighter-bombers. It is imperative that the Luftwaffe have a number of jet fighter-bombers ready for front commitment by the Spring of 1944. Any difficulties occasioned by labor and raw material shortages will be resolved by the exploitation of Luftwaffe resources, until such time as existing shortages can be made up. The Fuehrer feels that a delay in our jet fighter program would be tantamount to irresponsible negligence. The Fuehrer has directed that bi-monthly written reports, the first due on 15 November 1943, be made to him concerning the program of the Me 262 and the Arado Ar 234.

Beside the recognition of the need to clear the air and expedite production, the great importance of this message was that it showed Hitler (as an aftermath of the Goering-Messerschmitt conversation) had determined on the use of the Me 262 as a "fighter-bomber", not a pure interceptor as envisioned by Galland and Messerschmitt. In the months to come this decision by the German leader would be bitterly contested by the fighter proponents of the Luftwaffe and would play its part in keeping the Me 262 from making an early appearance as a fighter plane in defense of the Reich. Yet, Hitler's conclusion that an offensive weapon was needed at this time was correct in principle. What he failed to consider was that any offensive aircraft loses much of its effectiveness when air superiority has been lost, and Germany's claim to local air superiority in Europe was already becoming tenuous at this time.

Still, it was true that with North Africa lost, Italy out of the war, the Allies building up tremendous

strength in the West and the Russians steamrolling forward in the East, only a mighty, offensive weapon could save Germany from total defeat. The Me 262 had the qualifications to be such a weapon. As a jet fighter-bomber, readied in time and faster than the best Allied aircraft, the Me 262 could give Germany an offensive punch to stem the forthcoming Invasion (by reestablishing offensive German air power) as well as an offensive punch with which, once again, to be able to strike strong blows against the Allies without suffering inordinate losses.

On the other hand, the Me 262 operating as a fighter-bomber at low altitude and carrying a fair sized bomb load would have a performance only marginally better than Allied, piston engined aircraft. Such a condition posed a risk that would make the Jet plane little more effective than standard German fighter-bombers and argued strongly that jet fighters first be placed in action that would assure air superiority for the Luftwaffe before the Me 262 operated as a fighter-bomber. This was the course of action that should have been followed at the beginning of 1944 with all expediency.

However, in a conversation with Milch on 5 January 1944, Hitler went a step further when he emphasized the need for "jet bombers" (and modern submarines) to meet the expected Allied Invasion. The Me 262 fighter-bomber was a risky but realizable weapon at the start of 1944. The Me 262 jet bomber was another thing entirely.

The strong needs of the hour had taken Hitler off the track in the first place by placing the fighter-bomber ahead of the fighter interceptor in Luftwaffe planning, but when he became aware (as he did now) of some of the dangers in the first course of action he had proposed, he tried to overcome them and turned completely in the wrong direction.

Hitler had learned that the Me 262 was much slower at low altitude, where it would operate as a fighter-bomber, and slower still initially when it was carrying bombs. Additionally, the very newness of the weapon at



Captured Me 163 is seen partially dismantled at Freeman Field, Indiana. There also was Werke Number 191 301.

hand increased his fears. Operating at low altitude the Me 262 would surely fall into the hands of the Allies sooner than otherwise and thus give away all its secrets allowing the Allies to develop an early counter-measure. (That the Allies were already well advanced but a year behind the Germans in this field was not known by Hitler or the Luftwaffe.) Thus, instead of demanding that the Me 262 first be used to establish air superiority from which point it could work effectively as a fighter-bomber, Hitler devised another solution to the problem—the Blitz Bomber.

He reasoned that if the Me 262 should have its best measure of superiority at high altitudes, where it would also be less vulnerable to falling into Allied hands and compromising its secrets, then that is where it should operate. This deduction, coupled with his fanatical desire to avenge the destruction being reaped on Germany by countering with his own bombing campaign, led Hitler to advocate the Blitz Bomber. What he failed to see was that converting the Me 262 to a bomber (operating at medium or high altitudes) meant completely revising the machine so that it would include systems to aim the bombs and to drop them with accuracy, or include a bombardier's position with similar systems. Such changes could only set back the Me 262's advent into service by a period of time that would make it too late to have any effect in the coming Invasion. Yet, this is the state to which affairs evolved. Hitler's original error in emphasis was compounded into a grand blunder.

Before proceeding it should be noted that the Arado Ar 234 mentioned in Hitler's telegram of 5 December (which first flew on 15 June 1943 using a tricycle trolley for takeoffs and a set of skids for landing, and first appeared in its eventual production form, with a narrow track, tricycle landing gear, in April 1944) was being brought along for the vital role of high speed reconnaissance. Although it did enter service in this capacity in the Autumn of 1944, the type also was modified into a bomber, the Ar 234B-2, which

became operational late in 1944. Only some 200 Ar 234s entered service with the Luftwaffe before the end of the war, many going to training units, others to the bomber unit, K.G. 76, and some possibly to fighter units.

Although Hitler had reached the decision at the start of 1944 that the Me 262 would be a Blitz Bomber, work on the fighter version proceeded through the opening months of the year with only a little development being done on the bomber prototypes, including the bombardier model, Me 262A-2a/U2. A refusal to settle on one variant thus further slowed development. To such a state of affairs was added the Allied air attacks of the Big Week, 20-25 February 1944, which struck the Messerschmitt works at Augsburg and almost totally destroyed the pre-production Me 262As then being completed. This further set back the Me 262 program although a few Me 262 fighters, apparently unknown to most Luftwaffe and Nazi leaders, joined the original Versuchs (test) models in the Versuchs Kommando that had been formed as early as December 1943 by Hauptmann Thierfelder at Lechfeld. A further setback to Me 262 production came through an 8th Air Force attack of 24 April 1944 against Leipheim (where Me 262 production had moved following the February 1944 attack on Augsburg) which considerably disrupted jet aircraft production again.

To these events was added Hitler's rage when he learned (at the end of April 1944 during a conference with Milch, Fighter Chief Sauer and Goering) that no Me 262 had yet been built to carry bombs. He stormed, "Hot a single one of my orders has been obeyed!" Milch's comment that the Me 262 was designed as a fighter and not a bomber only inflamed Hitler's anger. Goering, who had by now lost all of his independence through the endless failures of the Luftwaffe to perform tasks he promised it would do, could only mimic the ideas of his Fuehrer. Hitler said there had to be hundreds of his Blitz Bombers. Goering echoed him, losing all perspective—the Me 262 was to be only a Blitz Bomber.

According to General Karl Bodenschatz of the Luftwaffe High Command, "The Fuehrer ordered expressly that

its (the Me 262's) development as a fighter should be continued." Yet, at the beginning of the Fighter Conferences at Obersalzberg, 23 to 29 May 1944 Hitler said, "I am not at all interested in this plane as a fighter." On 29 May, Hitler issued a telegram: "The Fuehrer orders that the Me 262 and Ar 234 are to be in fact bombers and not fighters." The same day, Goering announced to Messerschmitt, Bodenschatz, Petersen and others: "In order to avoid a misleading designation, I suggest we call the new aircraft a 'Blitz Bomber' rather than a fighter-bomber. Accordingly, the further development of this model will be entrusted to the General of the Bomber Forces."

When Galland arrived on the scene he was thunderstruck by this proclamation, and Goering informed him, "...it is not that the Fuehrer wants the new model to be only a bomber, quite the contrary, he is aware of its potentialities as a fighter. However, he does want all of those presently in production to come out as Blitz Bombers until further notice. It is his desire that we concentrate on the bomber question and that the problems of bomb-carrying capacity, bomb release clip design, bombsight development and bombardment tactics be given paramount consideration."

When Hitler decided to make the Me 262 a Blitz Bomber he set back its introduction to combat by a period of time that was much too risky for Germany; but, now, when he backed the Blitz Bomber decision to the hilt in May he was doing so under utterly adverse conditions. In March and April 1944, the Allies had gained complete air supremacy over all of Western Europe. Under such conditions, no bomber type could aid Germany's cause, yet the final culmination of a series of pyramiding errors was reached at Obersalzberg. Galland knew this and continued to fight against the decision until, in June 1944, he was removed from his post as Inspector General of Fighters on Hitler's order.

The inflexible stand on the Blitz Bomber was modified slightly by Hitler on 7 June during a discussion with Sauer. Initial production of the Me 262 would be limited to the bomber and testing of the fighter could continue, but "...under no circumstances is bomber production to be delayed while waiting for the results of such tests. Not until these tests have been completed and their results evaluated will fighter production be permitted to start. Once this point has been reached there is no reason why production capacity cannot be divided between the two models."

However, these views were outdated before they were spoken, for twenty-four hours earlier the Allies had invaded Europe and established a beachhead in France. The time had more than come for Germany to defend herself with every capability she possessed if she were to survive, but Hitler refused to recognize this.

(About this same time, Hitler also issued an order that Me 262 Blitz Bombers were not to be flown below 4000 meters so they would not fall into Allied hands. It was pointed out that with Germany's poor bomb aiming equipment such a restriction would give the Blitz Bomber a very poor measure of accuracy. To this Hitler responded that the Allied armies and their equipment were so numerous that a bomb dropped anywhere near them was sure to hit something of value. He thus, indirectly but tacitly, admitted the folly of the Blitz Bomber policy while refusing to change matters.)

For months to come, even as the Allies swept across France to the borders of Germany, the primary emphasis in the Luftwaffe would be on the Me 262 bomber. Despite this, work on the fighter version carried on at two Jager-Erprobungskommandos (Fighter-Experimental Commandos), one at Rechlin and the other at Lechfeld. The latter, under Hauptmann Thierfelder, made a number of interesting interceptions of Allied reconnaissance and bomber aircraft in the area of Southern Germany. Results were so promising that it appears Thierfelder took to attacking bomber formations alone until he was

shot down on such a mission. After that the Lechfeld unit limited its offensive testing.

Through all of 1944, one other factor was playing a key part in the development of the Me 262. Despite all the machinations of Hitler and Goering, and in a large degree despite Allied air attacks, Me 262 production continued to be held back by the ever-recurring problem of completing production Jumo 004 jet engines.

The first explorations into the possibilities of a jet engine at the Junkers Aircraft Works began as early as 1936. In 1939 a research group under Dr. Anselm Franz began studies on an axial flow turbo-jet engine which received the designation of 109-004 from the R.L.M. and became the Jumo 004 engine. With an 8-stage compressor and 6 combustion chambers the 004A was giving a thrust of 948 pounds in January 1941 on the test stands at Dessau. By August 1941 this figure was raised to 1323 pounds thrust. The low priority under which the project (like all other research projects in Germany) found itself was continually slowing development.

It was not until 1942 that the engine was developed sufficiently to give a thrust of 1850 pounds, after which aerial test flights began in March using a twin-engined, Me 210 airframe for the purpose. It was this 1850 pound thrust engine, Jumo 004A, that powered the first full jet flight of the Me 262 on 18 July 1942. By that time, an updated engine was under development, the Jumo 004B. This engine retained the same dimensions of the "A" model, was more reliable, weighed 100 pounds less and gave an almost equal performance. In January 1943, the 004B was giving 1874 pounds of thrust, and it was further improved so that when it was first flown on the Me 262, in October 1943, it was giving a thrust of 1984 pounds.

A great deal of effort was being expended at this time to increase the life of the Jumo 004. The engines in 1943 and into 1944 had an operating life of only four to five hours, far too short for service use. By stages engine life was raised, but it was not until March 1944 that the 004B was ready for full series production and June 1944 that moderate quantity production began.

The first 18 Me 262As, basically fighter versions, were accepted by the Luftwaffe in April 1944, and 7 more were accepted in May. June saw the first bomber versions accepted, numbering 28 aircraft in that month with 59 more in July. Of these first one hundred Me 262, the great majority of them went to train pilots in the operation of the new type. This training used up a high number of the original Me 262s (mostly in losses occasioned by pilots learning the eccentricities of the type the hard way), so that only a trickle of Me 262s were available for service throughout October 1944.

In November production was again slowed as work on the bomber version finally gave way to the fighter version. Me 262 fighters had again begun to be produced in August (5 machines that month and 71 in the following two months along with 137 bombers), and the changes on the assembly line kept production from rising until the last part of November. Further restraining of pilots used up many of the Me 262s completed, the vicious cycle repeating itself, so that it was not until the very end of the year that the Me 262 could come into service in any numbers at all.

If the engines had been perfected earlier, a similar number of Me 262s could have been ready for service in the early Spring of 1944; if the fighter function of the aircraft had been retained (and despite the engine development troubles) a moderate number of Me 262 fighters could have been service ready in July 1944. Thus it can be seen that Hitler's intervention with the Me 262 slowed its entry into service as a fighter by only five months. The real cause behind Germany not readying a service jet fighter far earlier in the war was the failure to push advanced, jet engine research in 1940-41 and to give the Me 262 and its engines a high development priority when it was selected over the He 280—as well as the failure to proceed with the He 280 for reasons

MONTHLY PRODUCTION OF MAJOR GERMAN JET TYPES*

TYPE:	1944 JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	1945 JAN.	FEB.	MAR.
Me 262 Bomber	28	59	15	72	65					
Me 262 Fighter			5	19	52	101	124	160	280	**
Me 163	3	12	13	35	61	22	90	**	**	**
Ar 234		5	10	18	40	40	35	**	**	**

4Production figures are the actual acceptance figures for the types mentioned: Source--United States Strategic Bombing Survey.

**Figures for these months are not available.

that must be considered political.

THE GERMAN JETS IN SERVICE

By the end of 1943, Allied Intelligence was well aware of the German development of jet aircraft, its knowledge being boosted greatly by the work of RAF Photo Reconnaissance aircraft. Recognized German jet airfields were kept under close surveillance by PR aircraft in the opening months of 1944, and when the jets began to appear in the air over Europe it was no surprise to Intelligence. Their appearance, on the other hand, was a considerable surprise to the pilots and airmen of the RAF and the USAAF who had not been apprised of their existence.

The first known encounter took place in what appears to be late June of 1944. On that occasion an RAF Spitfire was on a PR mission over Germany when its pilot suddenly found himself face to face with an Me 163 rocket propelled fighter. The engagement was reported later in the following words:

The Spitfire pilot was first aware of an approaching aircraft when he was preparing to make a run over German targets. Visibility was excellent and contrail height was 30,000 feet, so that visual interception was a possibility.

Flying at 37,000 feet, the pilot first saw a white trail about 7,000 feet below him and something over a mile distant horizontally. The trail turned into an interception course and then disappeared. The Spitfire pilot began a climb and during the next three minutes saw the trail reappear four times, at intervals, as the unknown aircraft climbed toward him. He observed that the plane apparently covered a distance of about three times the length of the visible trail before the next emission would appear.

By the time the Spitfire had reached 41,000 feet, the pilot could see the supposed enemy but could not identify the aircraft, except that it seemed to be "nearly all wing". At this point, the Me 163 was only 3,000 feet below the Spitfire, and only about 1,000 yards away horizontally. Evidently it had climbed about 8,000 feet and reduced the horizontal distance by about 1,000 yards during the time it took the Spitfire to climb about 4,000 feet. No further trails were seen, the pilot lost sight of the aircraft, and soon afterwards returned to base.

So passed the first encounter between an Allied aircraft and one of the new German jets, this one clearly being on a most interesting test flight. It was to be almost a month before the next meeting took place.

(Before proceeding with a month by month study

of the struggle between the U. S. Army Air Force and the German jets--the term "jet" being applied to both turbojet and rocket propelled aircraft--the following should be noted. Emphasis will be placed on the U.S. 8th Air Force as it had by far the greatest number of encounters with the German jets, and the jet combats of its fighters and bombers are summarized for each month in detail--the information being taken from Hq. AAF, Statistical Summary of Eighth Air Force Operations, European Theater, 17 August 1942 to 8 May 1945. Claims are given in the usual way--i.e. 2-1-3 shows: 2 enemy aircraft destroyed, 1 probably destroyed and 3 damaged. Additionally, all known claims for the destruction of enemy jets--other than by bomber crewmen--are listed under specific dates in the following manner:

Me 262 Capt Robert Smith 356th FG (8) Prague

This shows that an Me 262 was claimed destroyed by Capt. Robert Smith of the 356th Fighter Group of the 8th Air Force in the Prague Area.

(Claims are also given for units other than those of the 8th Air Force, with as much information as available being included. Based in England or Western Europe, besides the 8th, was the RAF, for which a few victories are noted, and the U. S. 9th Air Force, for which most victory claims are shown although it must be assumed that there were more 9th victories than listed here. Based in the Mediterranean area or Southern Europe was the U. S. 15th Air Force, all of its victory claims being listed, and the U. S. 12th Air Force, for which no claims are known. No attempt has been made to list victories claimed by bomber gunners of all these air forces--although a few are detailed in the narrative to give a hearing to that side of the struggle--as the possibility of repetition of claims for bomber crewmen is quite high and sufficient information was not available to allow an evaluation of such claims.)

JULY 1944

During the month of July, the U. S. 8th Air Force had its first encounter with the new Luftwaffe jets, and made its first claim. For the month 8th AF fighters claimed 0-1-0 jets in the air out of 4 encounters and 1 combat. Bombers of the 8th AF made no claims from 7 encounters and no combats.

25 JULY: The first recorded meeting between an Me 262 and an Allied aircraft occurred on this day in the Munich area, A De Havilland Mosquito from 544 Squadron, RAF, with Flight Lt. A. E. Wall as pilot and Flight

Officer A. S. Lobban as observer, was on a Photo Reconnaissance mission at 29,000 feet when F/O Lobban sighted a twin engine enemy aircraft closing very rapidly 400 yards astern. Surprised, because until this time no German aircraft had been able to challenge the Mosquitos or engage them on their solo reconnaissance runs, Lobban warned his pilot, and F/L Wall immediately gave his Mosquito full power.

The enemy aircraft, an Me 262, still managed to quickly pass the RAF machine, appearing at the right and above the pilot before turning to the left. Wall promptly turned to his right but one minute later the Me 262 was 2000 yards astern and closing fast. At 800 yards it opened fire and Wall commenced a gentle turn to the left, tightening his turn when the Me 262 had committed itself to an attack. The Mosquito turned inside the jet until it was almost on the German's tail, when the enemy pilot broke away.

Three times this maneuver was repeated with the enemy opening fire on each occasion but not scoring any hits. On the fifth pass, the Me 262 went into a shallow dive from 800 yards astern and came up to attack from below. F/L Wall immediately turned sharply left and up at 240 miles per hour, IAS. As he did, two muffled explosions were heard from underneath the Mosquito. Fearing they were hit, F/L Wall ordered Lobban to open the emergency exit so they could bail out if they received further damage. However, when Lobban finally managed to open the inner hatch he discovered that the outer hatch had disappeared—the last maneuver had been so violent this hatch had apparently broken off at the hinges, thus the two dull explosions.

The Me 262 had not hit the Mosquito, but it was making matters most uncomfortable for it, and Wall went into a steep dive for some cumulus clouds below at 16,000 feet. The Me 262 was unable to close as rapidly on the RAF plane as it had in level flight, but it did get to within 400 yards before Wall dove into the clouds. Three to four minutes later the Mosquito broke back out of the clouds and neither Wall nor Lobban could find any trace of the Me 262. They then proceeded to the airfield at Fermo, near Venice, where they landed without further incident.

28 JULY: The first meeting of the AAF and the German jets took place over Merseburg with Col. Avelin P. Tacon, Jr., CO of the 359th Fighter Group of the 8th Air Force, taking the lead role. He reported:

"I encountered two Me 163s. My eight P-51s were furnishing close escort for a combat wing of B-17s, and we were flying south at 25,000 feet when one of my pilots called in two contrails at six o'clock high some five miles back at 32,000 feet. I identified them immediately as jet-propelled aircraft. Their contrails could not be mistaken and looked very dense and white, somewhat like an elongated cumulus cloud some three-quarters of a mile in length. My section turned 180 degrees back toward the enemy fighters, which included two with jets turned on and three in a glide without jets operating at the moment.

"The two I had spotted made a diving turn to the left in close formation and feinted towards the bombers at six o'clock, cutting off their jets as they turned. Our flight turned for a head-on pass to get between them and the rear of the bomber formation. While still 3,000 yards from the bombers, they turned into us and left the bombers alone. In this turn they banked about 80 degrees but their course changed only about 20 degrees. Their turn radius was very large but their rate of roll appeared excellent. Their speed I estimated was 500 to 600 miles per hour. Both planes passed under us, 1,000 feet below, while still in a close formation glide. In an attempt to follow them, I Split-S'd. One continued down in a 45 degree dive, the other climbed up into the sun very steeply and

I lost him. Then I looked back at the one in a dive and saw he was five miles away at 10,000 feet. Other members of my flight reported that the one which went up into the sun used his jet in short bursts as though it was blowing smoke rings. These pilots appeared very experienced but not aggressive. Maybe they were just on a trial flight." That the appearance of these German jets did not come as a surprise to 8th Air Force Headquarters and that all units were now being kept fully aware of the developments in this threat to AAF daylight air superiority was borne out in a wire dispatched by Maj. Gen. William Kepner, CO of VIII Fighter Command, the same day. It read:

"Five jet propelled enemy aircraft, Me 163s flying in two separate formations, one element of two and one element of three, were seen in target area around Merseburg 7-28-44. The element of two were seen to approach bombers from the rear at about 32,000 ft. They were leaving very dense, thick, white contrails. Their formation was reported as very good and they maintained formation position in their diving attack. They made a slight diving turn attack at the rear of the bombers at very high speed reported as between 500 to 600 miles per hour. Eight of 359th Group turned into them but they only turned slightly away and continued, Group did not get a shot. After attacking, the jet wingman pulled up into the sun at 50 degree angle, leader continued in dive at about 45 degree angle. In climb jet gave off smoke in bursts which was assumed to be at times using full power at short intervals. Camouflage was rusty brown and highly polished. The drawings each group has of this aircraft for recognition training are reported as being very accurate. It is believed we can expect to see more of these aircraft immediately and that we can expect attacks on the bombers from the rear in formations or waves. To be able to counter and have time to turn into them our units are going to have to be in positions relatively close to the bombers to be "between them and our heavies. It is believed these tactics will keep them from making effective, repeat effective, attacks on the bombers. Attention is called to the fact that probably the first thing seen will be heavy, dense contrails high and probably 30,000 feet and above approaching rear of bombers. Jet aircraft can especially be expected in Leipzig and Munich area or any place east of nine degree line."

29 JULY: For the second day in a row units of the 8th Air Force attacked oil targets in the Merseburg area, and also for the second day in a row the Me 163s put in an appearance. This time, however, one was brought to task by Capt. Arthur J. Jeffrey of the 479th Fighter Group.

B-17s of the 1st Division and 3rd Division bombed Merseburg at 0935-0940 under penetration support of various units including the Lockheed P-38 flying 479th. The P-38s then gave withdrawal support, and at 1145 Capt. Jeffrey, leading Newcross Yellow Flight, was escorting a straggling B-17 (Dumber 7007 of the 100th Bomb Group) 11,000 feet over Wessermunde when a single Me 163 appeared. It made a slightly lowside 5 o'clock pass on the B-17 and followed through in a slight dive before levelling off. Capt. Jeffrey and his wingman took after the Me 163, and it made another slight dive, and climbed, weaving all the while. During this weaving Capt. Jeffrey closed and opened fire, observing hits. The Me 163 then climbed to 15,000 feet, giving off intermittent spurts of smoke. At 15,000 feet it circled to the left and the P-38 turned tighter getting a good deflection shot, with an estimated closest range of 300 yards.

The Messerschmitt now performed a mild, Split-S

and spiralled off into an 80 to 90 degree dive, giving off "jet" exhaust or smoke all during the dive. Capt. Jeffrey followed in a 90 degree dive, gentling it to 70 degrees, firing and observing strikes until the 163 began to pull away. Capt. Jeffrey started to pull out of his dive at 4,000 or 3,500 feet indicating a little over 500 miles per hour. He pulled out at 1,500 feet, blacking out while doing so. When his vision returned he could see no immediate sign of the Me 163 beneath the overcast, and he then climbed back up through the overcast to avoid flak. The entire engagement had lasted 3-4 minutes.

When Capt. Jeffrey filed his report of this combat, he was variously credited with an Me 163 as either Destroyed or Probably Destroyed. In the years following World War II, apparently on the premise that the Me 163 was last seen going down vertically at such a low altitude it could not possibly have pulled out, Capt. Jeffrey was given clear credit for destroying the first German jet in World War II. However, the former project officer for the Luftwaffe on the Me 163 and commander of the Me 163 unit, J.G. 400, Wolfgang Spate, has checked the records of his old unit and found that no aircraft was lost by J.G. 400 that day. This evidence, plus the fact that the combat report does not show clear proof of the destruction of the Me 163 Capt. Jeffrey engaged, confirms that this enemy aircraft was not destroyed (or probably destroyed as shown in the 8th Air Force Statistical Summary) but was only damaged. The first victory over a German jet propelled aircraft was still to come.

While Capt. Jeffrey was diving after his Me 163, the other two P-38s of his flight continued flying top cover at 16,000 feet behind and above the straggling bomber. They did not see the first jet attack, but at approximately 1148 another Me 163 made a 70 degree pass on the bomber from the sun. The two P-38s had been keeping special watch to high rear and had seen no contrails or any warning of an attack until the 163 was in its pass. During its dive the Me 163 emitted blue spurts. Its dive gentled to 60 degrees, then the 163 went into a cloud deck at about 8,000 feet. There was no chance for the high cover P-38s to follow.

AUGUST 1944

Daring August the 8th Air Force suffered its first known losses to enemy jet propelled aircraft when three fighters and one bomber were so lost. For the month 8th AF fighters claimed 2-0-1 jets in the air and 2 damaged on the ground. The fighters had 21 encounters with enemy jets and 10 combats. Bombers of the 8th AF had 30 encounters and 7 combats with claims of 0-0-1.

A great majority of the encounters and combats of August were with the Me 163 rocket fighters which turned most of their attention to the 8th Air Force's bombers. A number of points were noted about their tactics. The Me 163s climbed and dived at very high speed but on tail attacks, they closed no faster and perhaps a little slower than the standard German Bf 109 and FW 190. The jet fighters could not be spotted always by their contrails. Most of their attacks were made in a glide with the rocket motor turned off, and even when climbing under power their contrails might be very thin.

It was also noted that the jet fighters usually attacked in the vicinity of the IP or right after the bomb run—especially in central Germany. Me 163s sometimes attacked a low squadron of a bomber formation from 5 o'clock very low, rolled out about level with the high squadron and broke away toward 9 o'clock.

The jet fighters made individual attacks, but usually came in one after the other, each circling around for a second pass. Practically all attacks were dives from almost straight above, climbing attacks from very low, or gliding tail attacks. On tail attacks, Me 163s preferred to come in from around 5 o'clock, hit the left wingman of the low squadron from inside the formation,

and break away around 9 o'clock.

A favorite trick of the Me 163s was to get right behind the bomber formation, climb almost straight up to a point several thousand feet above, then loop over into a diving tail attack, sometimes breaking out through their own contrail.

Me 163s sometimes made high nose attacks, then climbed again and made high tail attacks. One made a high tail attack, broke away at 9 o'clock, and circled back for a climbing attack from 5 o'clock low. Others made up-and-down, fly-through attacks without singling out any individual bomber. They barrelled up through the formation, rolled over a few hundred feet above the bombers, then dived down through the formation again.

5 AUGUST: On this day the Luftwaffe jets scored their first major victory, although little exact information is known. It is known that on this day fighters of the 8th AF flew 614 sorties in support of heavy bombers attacking industrial targets in Germany and that 6 were lost. Half of these fell to the enemy's new jets, and the incident is related by a B-17 crewman who was engaged on operations against Magdeburg:

"Within two minutes after turning at the IP, I saw puffing vapor trails coming from three Me 163s which were about 35,000 feet high and about 9 o'clock to our course. They flew in the direction of our formation, then turned left to attack three P-51s which were flying approximately 3,000 feet above and to the left of our formation. The 'Jets' dived onto the P-51s, which were at about 8 o'clock to our formation at that time. The 163s were in trail as they swooped down on the P-51s. The attacks were pressed almost to point-blank range, then the enemy aircraft zoom-climbed into the clear sky above. I saw each of the three P-51s catch fire and dive earthward."

16 AUGUST: It was on this day that a pilot of the 8th Air Force scored the first AAF victory over a German jet fighter.

Me 163 Lt Col John B Murphy 359th FG (8) Leipzig

In all, 10 Me 163s were observed on this day, although only five attacks and passes were noted by bomber crews. The first engagement began when a B-17 Wing sustained separate attacks by two Me 163s that climbed from the deck to about 2,000 feet above the high group of the Wing. Both enemy aircraft made single, uncoordinated attacks in a glide from 12 o'clock, passing under the formation and climbing away under power at 5 o'clock. Immediately afterward, both the 163s attacked the high group again from 6 o'clock, gliding in from 2,000 feet above. After this attack the Me 163s made power dives and were engaged by P-51 escort fighters without tangible results.

Another B-17 group operating in the Leipzig area also encountered Me 163s. The first one came in from high at 3 o'clock in a regular pursuit curve. The attacking plane never opened fire and did not press the pass. Another Me 163 attacked the group one minute later and dove at a steep angle on the tail of a straggling B-17 from about 5,000 feet above and firing wing cannon at close range. The attacker broke away to the left and was not seen again—it did not use its rocket motor during the attack.

At this point an Me 163 made a single attack on the straggling B-17 from 1,500 feet above at 5 o'clock, firing with wing cannon. The B-17 took evasive action by skidding and the 163 was unable to score any vital hits. After the attack, the enemy fighter did a partial wing-over and went down 1,000 feet below where it leveled out and flew at approximately the same speed as the bomber for two minutes.

All of this latter action was observed by Lt. Col. John B. Murphy of the 359th Fighter Group. He had been



The Messerschmitt Me 262A-1, Werke Nr. 111 711, after being turned over to U.S. forces. (.Photo-USAF 165615)

flying escort to the bombers when he saw a contrail from an Me 163 coming in on the bombers from 8 o'clock at a distance of two miles. The jet fighter climbed to 28,000 feet and cut off power about 400 yards from the bomber formation. Lt. Col. Murphy, on the opposite side of the bombers, realized he could not intercept the jet attack on the bomber formation and correctly decided that the Me 163 would attack a straggling B-17 which was floundering along two miles to the right of the main bomber force. Although his P-51 was clocking more than 400 miles per hour IAS and had only two miles to cover, the Me 163 traveled more than a mile to the bomber formation, went past it and covered the additional two miles to the straggling bomber before Lt. Col. Murphy arrived. The 163 had overshot the straggling bomber and began to flatten out, losing 1,000 feet of altitude, at a point below the bomber. It was there Murphy caught the enemy fighter, half a mile beyond the B-17 at 23,000 feet.

He opened fire at 1,000 feet, 15 degrees deflection, closing to "zero" feet and getting strikes on the tail and left side of the fuselage before he overshot and pulled off steeply to the left. Immediately, 1st Lt. Cyril W. Jones, his wingman who had followed 1,000 feet behind him, came in slightly below the 163 at an angle of 10 degrees to the right and fired when 1,000 feet away. The enemy fighter flipped on its back and began to Split-S, but Lt. Jones allowed three radii in his sight and fired. When he saw no strikes he increased his lead to a 60 degree deflection shot after which he observed multiple strikes on the top of the canopy. He then hit the wash of the enemy aircraft, blacked out, and recovered at 14,000 feet. The Me 163 was last seen going straight down and was claimed destroyed—however, later assessment of this engagement restricted the claim to that for a Damaged enemy aircraft, and it is so recorded in the 8th Air Force Statistical Summary. But a confirmed victory was not to be long in coming.

When Lt. Col. Murphy pulled out of the climbing left turn he had initiated on overshooting the 163, he

saw his wingman going down to the right with another Me 163 circling off to the left, 5,000 feet below, in a fast, slightly downward, spiral to the left. Murphy peeled off and dove for a position slightly in front of the rocket fighter. While the 163 made two turns the P-51 closed at 400 miles per hour IAS in a 30 degree dive and came in on the left, inside the circle of the Messerschmitt. Lt. Col. Murphy opened fire with 10 degrees deflection from 700 feet and closed to 100 feet. He stayed inside the turn with ease for five to ten seconds before overshooting. Hits on the left side of the rear fuselage of the Me 163 caused a large explosion and that side of the fuselage came off from the cockpit back. The Me 163 flopped down in a spiral—the 8th Air Force had scored its first jet victory.

28 AUGUST: Twelve days after the first victory over an Me 163 came the first recorded encounter and victory over an Me 262 by the 8th Air Force, shared by two pilots:

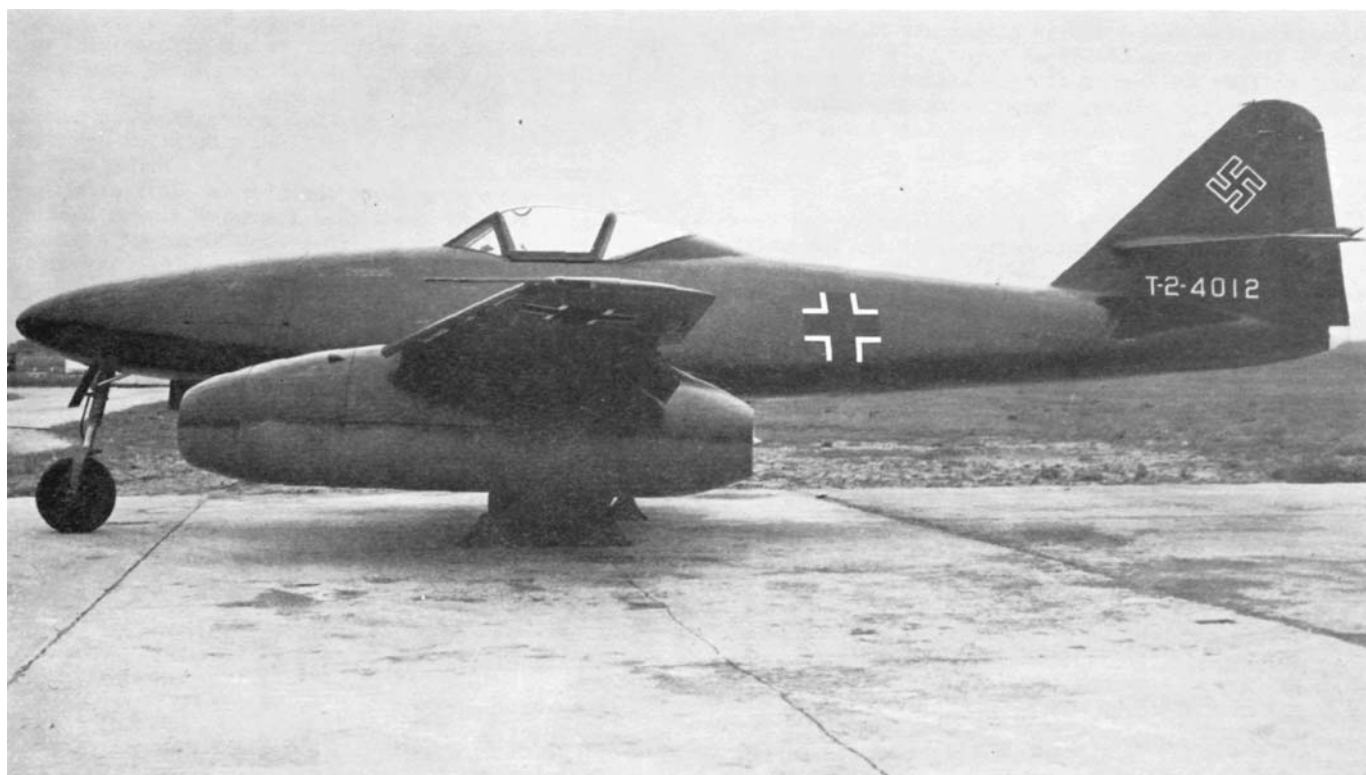
Me 262 (Maj Joseph Myers) 78th FG (8) Termonde
(Lt M O Croy Jr)

Flying Republic P-47s, the two pilots from the 82nd Fighter Squadron, 78th Group, were at 11,000 feet above Termonde in the Brussels area of Belgium when they sighted an Me 262 flying south at an altitude of 500 ft. The two Thunderbolts started down in a 45 degree dive although the speed of the German plane made it necessary to reduce the angle of dive in order to make an interception. The P-47s had reached a speed of 475 miles per hour IAS at 1,000 feet when they came within range. The Me 262 then began evasive action, making three or four very flat turns before Major Myers opened fire. At almost the same moment the twin jet fighter plowed into the ground at high speed.

SEPTEMBER 1944

Although the total number of encounters with jets

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After being rebuilt by Hughes Aircraft Company, this Me 262 was fully tested by USAAF. (Photo--Wright Fld)

was up for the 8th Air Force in September, combats were down compared to August, and there were no victories claimed over the Me 163s and Me 262s during the month. Fighters of the 8th AF had 26 encounters but only two combats in which they claimed 0-1-1. Bombers, on the other hand, had 121 encounters but only 10 combats and claimed 0-1-0. Known losses to jet aircraft were one fighter and one bomber.

Until this time it was the Me 163 rocket fighter that was most encountered in defense of the Reich, but a turn in events began near the end of the month. As the Allied armies won positions virtually on the German frontier, Reichsmarshal Goering ordered Adolf Galland to form a jet fighter unit for the defense of the Reich. Such a unit was to be formed from the two Jager-Erprobungskommandos at Rechlin and Lechfeld.

To head this unit, Galland assigned Major Walter Nowotny, one of Germany's leading aces with approximately 250 confirmed aerial victories. On 25 September, Nowotny took command of his new unit which was called the Kommando Nowotny, equipped with Me 262s and based at Achmer and Hesepe near Osnabruck, Germany. A total of 30 Me 262s was assigned to the unit.

OCTOBER 1944

In October jet action began to pick up slowly, mostly as a result of the Kommando Nowotny. Fighters of the 8th AF had 42 encounters and 27 combats during which they claimed 5-0-1. They also destroyed one jet on the ground. 8th AF bombers had 61 encounters and only 5 combats during which they claimed 1-1-1. No 8th AF fighters or bombers were known to be lost to enemy jet action.

2 OCTOBER: On this day the tactical 9th Air Force scored its first victory over a jet aircraft. The victor was:

Me 262 Lt V J Beaudrault 365th FG (9) Munster

FALL - 1963

At 1530 hours the 386th Fighter Squadron of the 365th Group was on a recon mission 20 miles southwest of Munster when it ran into four Me 262s. The jets were not in formation as the Squadron bounced two of them, chasing them all over the sky with their P-47s and being chased in return. Using water injection, one pilot was able to get on the tail of an Me 262 but was not able to close on it. Then he lost sight of the jet only to discover the enemy had swung around onto his tail with a tremendous burst of speed.

The first warning that 1st Lt. Valmore J. Beaudrault had of this encounter came when his Number 3 yelled over the radio, "My God, what was that?" His flight was flying top cover for the Squadron at 9,000 feet, and as Lt. Beaudrault looked around at the warning he was just in time to see a streak flash by his tail and then whip up into the clouds. Beaudrault immediately took his flight up in pursuit of the jet and lost the rest of the Squadron.

Failing to find the enemy the flight came back down below the clouds and spotted another Me 262. They went after it, using water injection to get their speed up above 400 miles per hour, and the overcast split up the flight until there was just Beaudrault and his wingman, Lt. Pete Peters. The enemy aircraft seemed to slow down until they were in range, and then it whipped around and shot by them less than 150 yards away.

The two P-47s were in instant pursuit, going down after the enemy jet, then it was above them, diving and firing its cannon at Beaudrault. Cursing, he hauled the P-47 into as tight a turn as he could manage and the 262 whipped by, unable to turn with him. Again and again this was repeated as the two planes vied with one another getting closer and closer to the deck. Suddenly, the white puffs of smoke that had been coming from the 262's twin jet engines stopped. The German was out of fuel, it appeared.

Beaudrault swung quickly in behind the enemy, now in a 300 mile per hour glide, and lined up. The 262 pilot began taking evasive action, slipping from side

to side as the P-47 moved in closer and closer. Beau-drault lined up for the final burst, but just as he was about to fire the German slipped sideways a little too much and hit the ground. There was a tremendous explosion, and then there was nothing left below but a burning fire and shiny pieces of metal scattered over an area of three acres.

5 OCTOBER: Although the Me 262 Blitz Bomber had been used spasmodically prior to October, it was not until the opening of this month that it began to see regular service in attacks against the strategic Nijmegen road bridge held by British forces. In early October, approximately 250-300 sorties were flown by enemy aircraft in each 24-hour period against this target--these consisted of attacks by FW 190 fighter-bombers, Ju 88 high-level bombers, Do 217 dive bombers and Me 262s using a variety of attack methods. Fighter patrols and anti-aircraft defenses were usually able to drive off the conventional aircraft but were ineffective in dealing with attacks by the Me 262s.

The Messerschmitts flew singly, at speeds indicated by AA predictors to be about 525 miles per hour, and most often attacked as follows:

- 1) At dusk, when visibility was poor and searchlights were not effective, they came in at 1,000 feet, diving to 500 feet near the bridge--operating low as true fighter-bombers despite Hitler's orders not to fly under 4000 meters.
- 2) During the day, they approached at about 25,000 feet, in a glide estimated at 15 degrees, and dived to release their bombs at 18,000 feet.
- 3) At night, they came in at approximately 12,000 feet and dived to 8,000 feet. Under these conditions of high speed and rapid change of height, radar and predictors of heavy AA were virtually useless. Evening attacks normally began at about 1925 hours and continued until approximately 2255 hours with an average of 17 attacks during the period. Attacks were then resumed sometime between midnight and daybreak.
- 4) On other occasions, Me 262s were employed in pairs with the first coming in at approximately 6,000 feet, followed by a second 4,000 yards behind and slightly lower. In one case, two aircraft came in toward the bridge in this manner, with the first aircraft showing its navigation lights, while the second did not. Low level attacks by one Me 262 frequently were covered by a second Me 262 flying 5,000 to 6,000 feet above.

It must be noted that the bombing thus accomplished by the Me 262s was quite indiscriminate, the inaccuracy being heightened by the use of anti-personnel bombs in most cases. These bombs, though causing some casualties, did little material damage.

Even though the attacks were mostly nuisance raids they were extremely vexing as the Me 262s were able to attack at will. Since radar and predictors of heavy AA units could not pace with the Me 262, it was decided that defense was essentially an automatic weapons problem. Both umbrella and radial barrages were therefore maintained around the bridge, and with this type of fire many aircraft were knocked down but no Me 262s were among them.

Royal Air Force fighter wings equipped with Spitfire XIVs and Tempest Vs had the task of patrolling the bridge from the air. Pilots of these aircraft were unable to overtake the Me 262 and their only chance of an engagement was to bounce the jets while flying high cover. On most such occasions the Me 262 was still able to half roll and dive away or to climb away at a much higher speed than the attacker could obtain. On one occasion, however, a Spitfire of 401 Squadron, Royal Canadian Air Force, met with success. This engagement of 5 October is described in the pilot's words as follows:

"I sighted an Me 262 coming head on 500 feet be-

low. He went into a climbing turn to the left, and I turned to the right after him with several other Spitfires chasing him. He then dived down toward the bridge twisting, turning and half rolling at very high speed. He flew across Nijmegen turning from side to side, and I saw a Spitfire get some strikes on him. He streamed white smoke behind the right wing root. He flew on still at a very high rate of speed, and I managed to get behind him and fire two three-second bursts at approximately 200-300 yards range. He zoomed very high, and I saw strikes on him in the left and right engine nacelles. A small fire started in the right nacelle and a big fire in the left one. While I was firing, I broke to the right underneath, and he turned down to the right behind me. I thought at the time he was going to attack even though he was in flames, but he passed behind me and crashed in a field. The enemy aircraft was painted green with yellow markings on the long nose. It rolled at very high speed, much better than the Spitfire, and the turns were very tight at high speed."

6 OCTOBER: Though there is no additional information available one claim was made on this date for the destruction of an enemy jet propelled aircraft:

Jet Pilot-Unknown 353rd FG (8)

7 OCTOBER: Daring 8th Air Force operations over Holland and Germany, 20 to 25 jet propelled enemy aircraft were encountered. Most of these were Me 262s, although four Me 163s attacked B-17s in the Leipzig area. The results of the day's engagements showed the 8th with its first multiple victories over the German jets, with the following victors:

Me 262 (Col Hubert Zemke)	479th FG (8)	Nordhausen
(Lt Norman Benolt)		
Me 262 Lt Urban L Drew	361st FG (8)	Achmer A/D
Me 262 " " " "	" " "	
Me 163 Pilot-Unknown	364th FG (8)	

During action on this day, Lt. Urban Drew of the P-51 flying 361st became the first pilot to destroy two jets in one day. He found his victims just taking off from the Kommando Novotny base at Achmer and shot down Lieutenant Robert (flying Me 262, Werke Number 110 405) and Oberleutnant Bley (flying Werke Number 170 307) at approximately one thousand feet altitude before they could take effective evasive action.

The third Me 262 claimed on this day was at first thought not to be a jet. When Col. Hubert Zemke, CO of the 479th, and Lt. Benolt returned from the mission that day they claimed an Me 109 as destroyed and shared between them. However, when the film from their gun cameras was processed their victim was identified as an Me 262--under fire from both P-51 pilots the left wing of the jet broke off in a 520 mile an hour dive at an altitude of about 10,000 feet.

As for the fourth victory of the day, a 364th Group Mustang pilot surprised an Me 163 from the rear while it was attacking straggling heavy bombers, and he sent it into a spiraling dive from which it crash landed and burned after strafing attacks.

An unconfirmed claim for 7 October has been found stating that "a P-47 destroyed an Me 262 while it was attempting to land at an enemy airdrome." So far the unit of the 8th or 9th AF to which this Thunderbolt belonged has not been identified, but if the report is correct, it would up the total of victories over the German jets to five for the day.

13 OCTOBER: With the Me 262 Blitz Bombers still active over Holland, an RAF Hawker Tempest scored a kill. The Tempest pilot was flying 14,000 feet over Volkel when

he sighted vapor trails approaching. An Me 262 came up rapidly, slightly above the Tempest whose pilot opened fire with two long bursts head-on. The Me 262 came through, passing within 100 feet of the Tempest which was caught in the jet's slipstream and thrown temporarily out of control.

When the Tempest pilot righted his aircraft, he did a fast 180 degree turn and chased the jet in a shallow dive. The Me 262 pulled away, however, continuing its dive for several miles. Then it pulled up, climbing vertically for almost 800 feet, and levelled out.

At this point the Tempest pilot began a right turn and, when the enemy also turned right, managed to close up a little. The pursuit continued for about 40 miles before the German, probably believing he had shaken off the Tempest, slowed down and was overtaken. Now at 10,000 feet altitude, the Tempest pilot fired a short burst from about 500 yards dead astern but missed. He closed to 150 yards and fired another short burst which went home. The Messerschmitt suddenly exploded like a Flying Bomb and threw off a number of pieces, including the pilot in a parachute. It went down in a shallow spin and exploded on the ground, where the remains burned out.

The Tempest squadrons of No. 122 Wing, RAF, by the end of the next four months had claimed the destruction of six Me 262s and one Ar 234.

NOVEMBER 1944

November proved to be a busy month in the 8th Air Force's struggle with the German jets and one of reorganization for the Luftwaffe. Fighters of the 8th AF had 137 encounters during the month and 29 combats in which they claimed 11-0-7 enemy jets. On the ground they claimed the destruction of 41 jets and 17 damaged, but later assessments have tended to scale down these ground claims. The bombers of the 8th AF had 53 encounters during November with 13 combats and claims of 1-1-1. Known losses to the jets were 2 fighters and no bombers.

1 NOVEMBER: In a wild melee over Holland, the 8th Air Force scored one jet victory for the day:

Me 262 (Lt Walter R Groce) 56th FG (8) Zwolle
(Lt William G Gerbe) 352nd FG (8)

Weather conditions on 1 November limited attacks by the 8th AF which dispatched only 318 heavy bombers against two synthetic oil plants at Gelsenkirchen and the Hindenburg Bridge over the Rhine at Rudeshine. B-17s of the 1st Division made the Gelsenkirchen attack with little opposition and were returning to England via Holland under P-51 escort when they were intercepted by a lone Me 262. The jet, Werke Number 110 386, piloted by Oberfahnrch Banzhaff, approached the bombers and fighters at 38,000 feet. At 1412 he put his machine into a dive toward the top cover fighters flying at 32,000 feet below him, a section of the 20th Fighter Group. He came down in a perfect bounce on Yellow Flight of the 20th, fired in a 30 degree dive on the Number 4 man, 1st Lt. Dennis J. Alison, and shot him down in flames. Then Banzhaff continued his dive over the Fortress formations but was immediately pursued by P-51s of the 20th Fighter Group.

All of this action was seen by members of the 56th Fighter Group, who had been escorting Liberators with their P-47s, and they immediately turned toward the German jet. At the same time, P-51s of the 352nd Fighter Group also went after Banzhaff. It seemed that every American fighter plane in the sky was in a mad scramble to get in a shot at him.

Banzhaff continued his dive to about 10,000 feet then made a climbing 180 degree turn at full throttle, taking up a northerly heading toward the Zuider Zee just above a layer of clouds. If he had gone into the clouds

at this point he would have been safe from the aircraft of the three groups chasing him, but he apparently felt his speed would allow him to out-race his pursuers. However, in making his 180 degree turn he gave the diving P-51s and P-47s an opportunity to cut him off. Both Mustangs and Thunderbolts opened fire hitting the jet on the left side of the fuselage and the left wing. Lt. Flowers of the 20th, pulling over 72 inches of mercury at 3000 RPM, scored hits. So did Lt. Gerbe of the 352nd. So did three other pilots. Lt. Groce, White 4 of the 63rd Squadron, 56th Group, called his mates on the radio, "Spread it out and we'll get him if he turns." A moment later the hounded Banzhaff made a climbing turn to the left and put himself slightly above Lt. Groce's flight. Groce pulled his nose right through the Me 262, in order to get enough deflection, firing all the time. The jet's right engine burst into flames, the Me 262 fell off into a spin, and Oberfahnrch Banzhaff bailed out.

Six pilots from the three groups involved in this fight over Holland from the Enschede to Zwolle areas claimed the Me 262, but subsequently the victory was awarded on a share basis between Lts. Groce and Gerbe.

2 NOVEMBER: While over Bielefeld, Germany on the 2nd, B-24 combat wings were attacked at 20,000 to 24,000 feet by two Me 262s which fired rockets at the bombers from 150 yards. This was the first known report of rocket firings by Jet aircraft.

In additional action a single P-47 of the 56th Fighter Group was damaged by the attack of a jet fighter. The jets, however, only made up a minute part of the intense operations of this day when over 400 German fighters attacked 1121 8th AF bombers and their escorts.

4 NOVEMBER: P-47s and P-51s of the 8th Air Force, flying heavy bomber escort over Germany, reported Me 262s operating in twos and threes and attacking only straggling fighters. On one occasion, a jet aircraft flew through a fighter formation, attempting as much to break it up as to inflict damage. No attention was given to the bombers by the jets.

There is no record of any claims by 8th AF fighters for this day. However, Luftwaffe records show that one Me 262, Werke Number 110 48 3, was shot down near Luneburg.

6 NOVEMBER: Two German jets fell victim to the 8th Air Force on this date, with the scoring pilots being:

Me 262 Capt Charles E Yeager 357th (8)
Me 262 Lt William J Quinn 4th (8)

Lt. William J. Quinn was in a flight operating over Germany that also included Capt. Gerald Montgomery. When two Me 262s appeared 5,000 feet below them, the flight immediately went down to do battle. "One suddenly turned into me," Lt. Quinn reported, "and I opened fire. I saw my bullets hitting his canopy and he immediately peeled off and went into the ground.... Capt. Montgomery chased a jet right into its hangar." Of this last action, no more is known.

During his kill, Capt. Yeager of the 363rd Squadron of the 357th Group, also managed to damage two jets.

8 NOVEMBER: On this date, the Kommando Nowotny saw its last action while apparently losing four Me 262s. Only the participants in two kills are known, however, and these are:

Me 262 Lt James W Kenney 357th (8)
1/2 Me 262 Capt Ernest C Fiebelkorn 20th (8)

In the first of these two kills, Lt. Kenney tangled with Lieutenant Franz Schall, flying Werke Number 110 404. It all began when another member of his 362nd Fighter Squadron, 357th Group, developed a rough engine

on the way to the target, and Lt. Kenney was designated to escort the damaged Mustang back to England.

On the return trip, somewhere over western Germany above a solid undercast, the two Mustangs approached a group of some 13 Fortresses who had just bombed and were turning west. As the bombers were unescorted, Lt. Kenney decided that he and his squadron mate should escort them home if the other's engine would allow it. It would and the two began to move up into escort position when Lieutenant Schall made a pass on the bombers from 10 o'clock high and then came back past the Mustangs. The two P-51s turned to meet him but had not completed their turn when Schall came back past Kenney. Seizing the opportunity Kenney fired from a 90 degree position and saw strikes on the jet's left wing and engine.

Schall apparently did not realize he'd been hit, for he later reported that at this point my "throttles jammed though machine was flyable". Smoke issued from the damaged jet engine, Schall struggled with his throttles to no avail, the 262 did a split-S just above the clouds, leveled out and Schall looked back to see the two Mustangs hanging on his tail. There was nothing more for him to do, since the Mustangs were now faster than his machine, and he bailed out.

While Schall had struggled with his machine, Kenney had taken a considerable amount of film of the Me 262, getting so close he was almost flying formation with it. (Schall survived his bailout but was later killed, during the Great Jet Massacre of 10 April 1945 while flying Me 262s with J.G. 7.)

In the second known kill for 8 November, the following is quoted from the history of the 20th Fighter Group: "Capt. Ernest C. Fiebelkorn was all set for another battle and gave chase to an Me 262. However, a P-51 from another group got there at the same time and just as the two pilots got into position, the Me 262 spun in and exploded without anyone having fired a shot."

There is no definite record of who the other pilot may have been, but it is possible that he was a Capt. Haydon of the 357th Group. However, Haydon, who also seems to be credited with 1/2 Me 262, may have shared his with another pilot on 18 November.

The third jet loss of the day was Werke Number 110 400 piloted by Major Walter Nowotny. To this date, the man or men who shot him down have not been identified. It is known that he attacked a bomber formation escorted by Mustangs and that one or more P-51s caught up with him. His last radio transmission stated, "Just made the third kill.... Left jet has failed...been attacked again...been hit...." His further words were not understood, but seconds later his Me 262 came screaming down, burst into flames and crashed six kilometers north of Bramsche before he could get out. (Information given by the late, great ace expert, Patrick J. Cassidy, Jr., from Luftwaffe files and the account of Oberleutnant Hans Dortenmann, then with IV/J.G. 54.)

The fourth Me 262 lost by the Kommando Nowotny on this day also has not been identified and there is no known claim for it. It may have been lost to operational reasons.

With the death of Major Nowotny and the loss of four aircraft in one day, the Kommando was withdrawn from combat. The situation is covered in a report by the chief test pilot for Messerschmitt, Fritz Wendel, who had been on an inspection tour with the Kommando Nowotny at this time. His report states:

"The Kommando Nowotny was withdrawn for a refresher course at Lechfeld, both flying and part of the technical staff, after four crashes on 8 November 1944. This withdrawal was ordered by General Galland who had been with the unit on 7/8 November. I have already stressed weaknesses and faults in the leadership and training in this Kommando, in my last report. The pilots are only partly 'fighter trained' and go into action after only two flights in the 8-262. In this respect, they have never altered, and it was only after

Major Nowotny was shot down and killed on 8 November 1944, after an air battle with a large number of Mustangs, that General Galland gave the order for the 'removal'. The Kommando should be back to full strength in 8 to 10 days, and ready to go back into action. Total victories during this period (1 October to 12 November 1944) are 22 and 4 possibilities. Losses to our own machines total 26 out of a delivery of 30. General Galland was definitely pleased with the findings."

Following the refresher training, the Kommando Nowotny was soon to furnish the nucleus for Germany's first jet fighter wing, J.G. 7. This new unit was formed by the end of 1944 by Oberst Steinhoff and led by Major Theo Weissenberger. Its major disposition of units was to be I/J.G. 7 at Branderiburg-Briest; II/J.G. 7 at Neumunster; and III/J.G. 7 at Parchim.

For the remainder of November (and most of December), the Me 262s were seldom seen in defense of the Reich due to the belated decision to go all out to develop jet fighter units to halt the Allied air assaults.

26 NOVEMBER: It was during November that photo aircraft of the 15th Air Force first encountered the new jets, and on this day they suffered one of their first losses to an Me 262.

Major Rudi Sinner was scrambled from Lechfeld on the report of four approaching Lockheed Lightnings. At 1300 hours he intercepted these aircraft and made an unsuccessful attack on the PR Lightning. Twelve minutes later, he returned and made an attack on one of the escorting P-38s, flown by Lt. Julius Thomas, and shot it down.

DECEMBER 1944

Operational use of German jet aircraft in defense of the Reich, which had slacked off greatly in the last three weeks of November, remained at a low ebb through December. Fighters of the 8th AF had 74 encounters with only 15 combats and claimed 2-0-6 jets while one fighter was known to be lost to the jets. On the ground the fighters destroyed 5 and damaged 9. 8th AF bombers had 43 encounters and only 8 combats; they made no claims and reported no losses to jet fighters.

Little specific information has come to light on the jet battles of this month (there is no information available as to which units or pilots scored the two 8th AF jet victories) but a few facts are evident. For the first half of December there was little German air activity. The Luftwaffe was conserving and building its forces for the Battle of the Ardennes which broke out on 16 December. In the days that followed, the majority of Me 262s that saw service did so in the bombing role.

There were 450 German aircraft operating over the front on 17 December, some of which were jets, and large numbers on succeeding days. It would seem that the 8th Air Force scored its jet victories in the last two weeks of the month. Possibly the 9th Air Force also scored some victories over the Me 262s. It is known that No. 83 Group, RAF, destroyed an Me 262 on 24 December; and 486 Squadron Royal New Zealand Air Force claimed 'the destruction of an Me 262 on Christmas day—one AAF report stating there were six jets operating at one time that day in the Bonn, Liege, St. Vith area in support of the German offensive.

22 DECEMBER: On this day, fighters of the 15th Air Force scored their first victory over the German jets. The victory was shared by:

Me 262 (1st Lt Eugene P McGlaufflin) 31st FG (15)
(2nd Lt Roy L Scales)

These two members of the 308th Squadron, 31st Fighter Group, were flying escort to a PR mission in their P-51

Mustangs when they met and destroyed the Me 262.

In December the 15th Air Force had been experiencing an increased number of encounters with German jet aircraft. Most of the encounters reported were experienced by Photo Reconnaissance planes and their escort fighters. From the experience of these encounters 15th AF intelligence officers reported some observations:

"The angle of attack was usually out of the sun from above and behind, though at least one head-on attack was reported. Pilots of jet propelled aircraft were able to distinguish between photo recon planes and their fighter escort and directed...their attacks against the photo aircraft. If the escort was behind the photo plane, the Me 262 did not hesitate to come in directly underneath, relying on its rapid rate of closing to make a pass before the escorting aircraft could turn into it. The jet aircraft then easily outdistanced the U. S. fighters in straight and level flight. In one encounter with P-38s, an Me 262 peeled off from 23,000 feet in a 60 degree dive, then did a half roll and dived straight into the clouds. The favorite evasive maneuver of the 262 when fired upon was the execution of a Split-S into a cloud bank."

31 DECEMBER: As 1944 drew to a close a harbinger of things to come (or of things that might have been much earlier) was observed by a 9th Air Force Photo Reconnaissance pilot. He was on a PR mission over Germany when he saw no less than "24-plus Me 262s flying in formation southwest of Trier". The jets were flying "in a four-flight formation similar to U. S. four-plane fighter formations. Individual aircraft in each flight were arranged with three leading, line abreast, with two or three in trail--also line abreast." This was the first time a large formation of German jets had been seen.

A fair idea of the non-operational losses that Luftwaffe units were suffering through 1944 and into 1945 while introducing such a new type as the Me 262 can be gleaned from a sampling of Fault Reports gathered by representatives of the Messerschmitt A. G., Augsburg for December 1944 and January 1945. These Reports cover loss and damage to Me 262s during test and ferrying flights by operational units, operations where no contact was made with the enemy, and through the poor judgment of inexperienced pilots. They give excellent testimony as to how the non-operational problems incident to the new type further kept the Luftwaffe from increasing the number of operational Me 262s.

1.) "On 17 December 1944 I took off in Maple 170 047 (Maple was the code name for the Me 262) to fly from Brunswick-Waggum to Parchim. Due to shortage of fuel, I was forced to make an intermediate landing at Neustadt-Glwe. The take-off in Neustadt-Glwe was normal, but when I found myself near Parchim, I noticed that the 'Automaten' of the tank pump had sprung out. I pushed it in, and as I circled the airfield it jumped out again. While I was pushing it in once more, I noticed strong arcing (sparks) on the main switch panel and at the same time the right engine cut out. I decided to land immediately and approached the runway at slightly under the required speed. I throttled up again but the right engine refused to start. I landed crabwise along my direction of flight. Due to this, first the nosewheel and then the main undercarriage broke loose from their mountings."

2.) "On 21 December 1944 I took off in Maple 500 036 with 2 aircraft for ferrying from Obertraubling to Eger. About halfway there, I could no longer see my Rotten aircraft, so I flew around in several wide curves. As I could not find him, I decided to fly back to Obertraubling. When I

could not locate the field at my first attempt, I made a forced landing on a training ground (for troops). After an uneventful landing, I took off again. On take off I hit an unseen sunken road. My undercarriage collapsed and the aircraft was (8556) damaged."

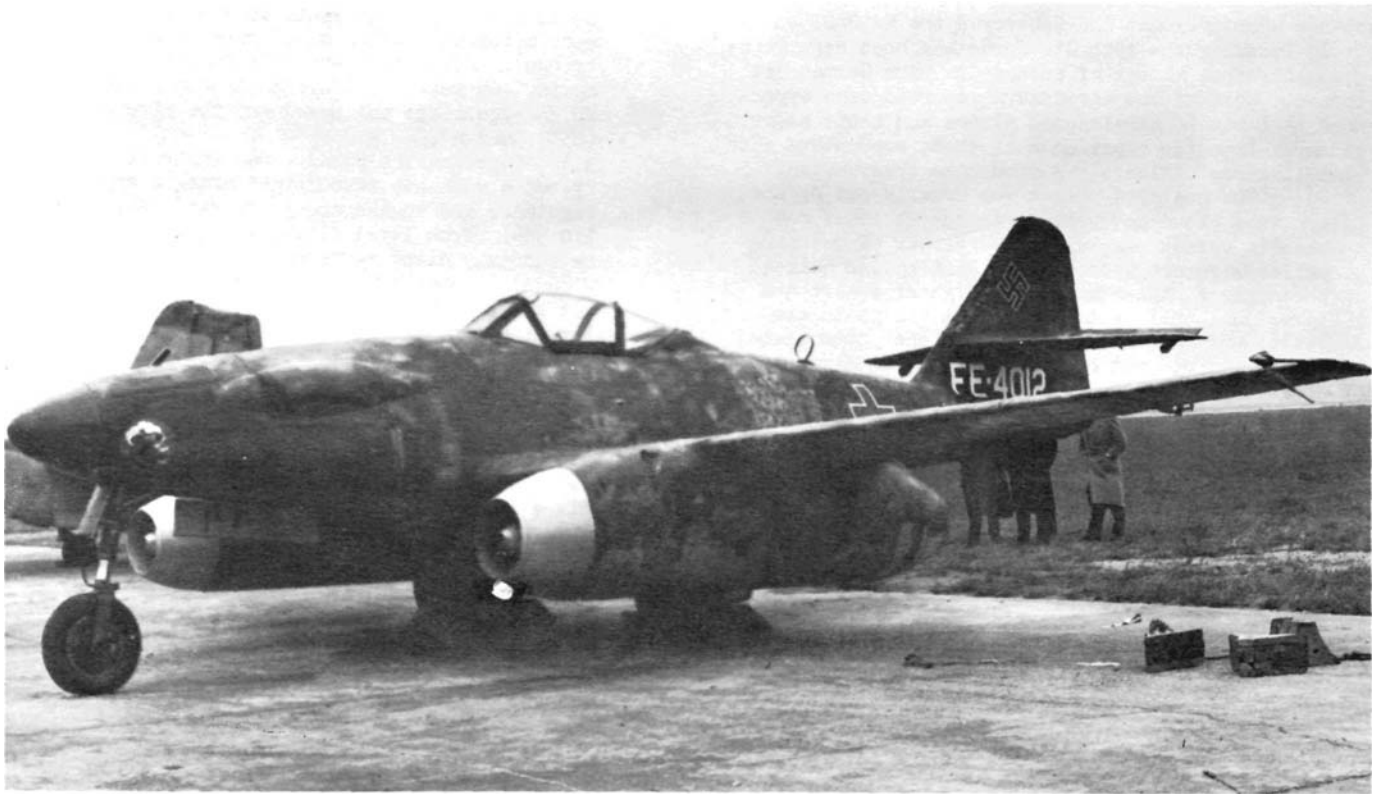
3.) "Oberfahnrich Schnurr had instructions to carry out a workshop test flight after a generator regulator and engine change on Maple Werke Nr. 110 564. From level flight at about 600 meters, he suddenly dived vertically down (and into the ground). Schnurr was experienced on the type and was known to be a reliable, disciplined and competent pilot. It is presumed that the accident was not his fault. It is possible that due to a change of trim, nose-heaviness was caused. The reason cannot be determined."

4.) "Oberfahnrich Ast looped Maple 110 479 at 4,500 meters and went into a spin. Due to excessive speed the aircraft went out of control and dived vertically."

5.) From Fault Report of III/J.G. 7. "At 1133 hours on 1 January 1945 I took off for an operation in Werke Nr. 110 407 and climbed to a height of over 10,000 meters. After a short flight at this altitude, both my engines cut out. I immediately switched both fuel pumps off and closed both combustion taps. As I switched the ignition off I closed both throttles to the 'Stop' position. Shortly afterwards, I made contact with 3 enemy Mustangs. I dived from my present height to 6000 meters. Here I attempted to make radio contact, but I was unheard. As I had dropped 4,000 meters, I tried to restart the engines. In the meantime I opened the left combustion tap and switched on the fuel pump of the forward tank. I pressed the ignition of the left throttle several times, in the 'Stop' position. However, the engines would not start. I then tried to start the right engine but this likewise would not start. I tried to start the engines again at a lower altitude with my speed reduced to under 350 Km. They still refused to start. I then decided to make an emergency landing in the area of Ulzen. My landing followed in a field with my undercarriage lowered. The nosewheel and main undercarriage broke off when they hit a furrow in the field. The engines also hit the ground and broke loose. The left engine hit the fuselage in such a way that the fuselage was fractured behind the auxiliary tank. About 80% damage."

6.) From Fault Report of III/J.G. 7, dated 1 January 1945. "Unteroffizier Detjens, in Werke Nr. 500 039, took off with me on his first operational flight against the enemy. He experienced trouble with his undercarriage but he could not see this properly himself. I, as his Rottenfuhrer, could not get near to him, so I throttled back and flew around in a wide circle. He received an order from me to land, but because landing was difficult due to snow conditions on the ground, despite clear visibility, Detjens wanted me to lead him back (to the airfield). Instructions from the Control Tower were quite clear and Detjens was brought back over his own field. He, however, did not realize this. Unfortunately Detjens was not equal to this situation. He flew over the field and made a forced landing (beyond) due to fuel shortage, claiming that his fuel position had altered since landing was ordered and that he did not understand the position. The crash can be ascribed to Detjens' inexperience."

7.) From Fault Report of DHL/Jag. 7. "On 19 January 1945, in Werke Nr. 110 775, I took off with Oberfeldwebel Beiner on a Rotte training operation. After take off I tried to raise my undercarriage, by continually operating the on and off switches,



This unidentified version of the Me 262 is seen with USAAF Test Number. (Photo-USAF 166315)

but with no result. I decided to land and report this to my Rottenfuhrer. At the same time I did not know that as I took off the right mainwheel had fallen away. When landing I noticed that the aircraft pulled very sharply to the right and tried to keep the aircraft straight by fierce braking. After slowing down I turned the aircraft sharply to the right. During this turn the left mainwheel turned through 90 degrees and the right mainwheel axle, stub and piston strut collapsed, the aircraft falling on its right engine with subsequent damage."

8,) One final report cites an incident of 17 February. "I took off with Maple Werke Nr. 111 008, Identification Green 2, at about 0902 hours for a workshop test flight. Take off was normal. During a 'Tornadoanflug' from Burg, after about 10 minutes flying time, the right turbine suddenly cut out, but was restarted and remained normal. After returning to the field, I had to overshoot due to an obstruction (motor vehicle). After climbing and orbiting the field I lowered the undercarriage again and found that the electrical indicator for the right mainwheel was not functioning. I turned on the compressed air bottle to operate the undercarriage. In spite of this, the indicator still did not register. I asked Control over the R/T if my undercarriage was down and received the reply, 'Turn over the Tower.' Then I suddenly noticed that the temperature of the right engine had risen to 700 degrees and that flames were coming from the engine with a loud hissing noise. Therefore, in order to cool the engine down, I throttled the right engine back. The engine stopped with a loud report. The aircraft yawed to the right and crashed in a young, pine tree plantation in the Fohrde area after a dive at an angle of about 50 degrees."

JANUARY 1945

Air combat with the German jets continued in small

skirmishes for the 8th Air Force during January. 8th AF fighters had only 54 encounters but a much higher percentage of combats than previously with 36, during which they claimed 7-0-5 in the air and 6 destroyed on the ground. Bombers of the 8th AF had but 12 encounters and 3 combats, claiming 1-0-1. No aircraft from the 8th were known to be lost to jets during the month.

During January General Galland set about forming a new jet fighter unit, Jagdverband 44 which was to be of a size larger than a gruppe but smaller than a geschwader. Slowly staffed with the finest, remaining fighter pilots in Germany J.V. 44 worked up at Brandenburg-Briest, transferred to Muhchen-Riem on 31 March 1945, and was in the Salzburg area at the close of the war.

13 JANUARY: Despite negligible jet activity on this day, there was one victory claim by:

Me 262 Lt Walter J Konantz 55th FG (8) G'bels't

Flying a P-51, Lt. Konantz was circling Giebelstadt Air-drome, near Wurzburg, Germany, and preparing for a strafing attack when an Me 262 took off. Swinging quickly in behind this aircraft, he was able to make an attack at 2,000 feet altitude and shoot down the Me 262. (There is some evidence to point to the fact that this combat may have taken place on the 11th rather than the 13th of January.)

14 JANUARY: Some 275 German fighters attacked 8th Air Force bombers between Hamburg and Berlin. Some of these were jet aircraft, and at least the 20th Fighter Group managed to damage one. Although there are no known claims for the day, one Me 262 from J.G. 7 fell before the guns of AAF fighters. The German account of the loss is as follows:

"At 1232 hours (flying Maple 130 180-Red 13) I took off with a Rotte of Maple aircraft from Parchim to attack an Anglo-American bomber and fighter formation. Whilst climbing, at a height



The Heinkel He 162, People's Fighter, that was designed to be flown by semi-trained pilots. (Photo-USAF 32102)

of about 6000 meters, I suddenly noticed that the temperature of my right engine had risen considerably. I then saw that my aircraft had lost a lot of fuel between the fuselage and the right engine near the landing flap, after I had switched off the fuel. I switched the right engine off. After a few minutes I tried to restart it but it produced dense smoke. I heard in my headphones that enemy aircraft were making a low level attack on Parchim airfield. I called up the Operations Room of J.G. 7 and asked if I could land in Brandenburg-Briest. However, I was ordered to land in Neuruppin. In this area I found more enemy fighter formations; about 1000 meters above and in front of me I saw 3 Mustangs on the left and 4 on the right coming towards me. I dived under them at an angle of 15 degrees in order to avoid their attack. Nevertheless I received hits in the left wing, engine, fuselage and cockpit during which I was wounded by a glancing shot and a splinter. I pulled my machine over to the right and bailed out. The aircraft crashed (in flames) near Logow, Kreis Neuruppin."

15 JANUARY: During this day the main weight of the 8th's heavy bomber attacks was concentrated on German Control Stations in southern Germany. These stations were responsible for the handling of jet aircraft in their operations over the area. There was one victory.

Me 262 Lt Winks 357th FG (8)

A member of the 364th Squadron of the 357th Group, Lt. Winks was on a Ramrod when he scored his Me 262.

21 JANUARY: No claims known for this day, but Lts. Lowell E. Einhaus, Robert H. King and Garth L. Reynolds of the 77th Squadron. 20th Fighter Group, stirred up a hornet's nest when they escorted a PR Mosquito over Stettin, Germany. Between 1140 and 1200 they mixed it

up with no less than 14 Me 262s. The jets attempted numerous passes at the Mosquito and its escorting P-51s, but on each occasion the Mustang boys turned into them and the jets broke off their attacks. None of the passes were successful, but because of the tremendous speed of the Me 262s, it was impossible for the Mustang pilots to close in for a good squirt at them, although several shots were fired out of range.

25 JANUARY: There were two victory claims on this day, made by the following pilots:

Me 262	Lt Roland R Wright	357th FG (8)	Heilbron
Me 262	Lt D E Karger	357th FG (8)	Heilbron

These two Mustang pilots from the 364th Squadron, 357th Group, scored their victories near Heilbron, in the Munich-Augsburg area. (There is some evidence to indicate that these victories may have taken place on the 14th rather than the 25th of January.)

FEBRUARY 1945

Operational use of the German jets began to pick up tempo during February. Fighters of the 8th AF had 118 encounters during the month and 71 combats during which they claimed 20-1-17 in the air and 1 destroyed and 8 damaged on the ground. Bombers of the 8th AF had 145 encounters resulting in the extremely high percentage of 39 combats. Claims were only 0-0-3. Known losses to jets by the 8th were 1 fighter and 2 bombers.

8 FEBRUARY: Though there were no claims on this day, there was an interesting report from the 15th Air Force.

Five Lockheed P-38s, flying escort for a photo mission near Munich, sighted two Me 262s as they appeared out of a haze at 7 o'clock, 1,000 feet above. The enemy planes continued north in level flight after the P-38s had fired from out of range. Ten to fifteen minutes later a Messerschmitt 109 was sighted at 9 o'clock and

about 3,000 feet below. Two P-38s unsuccessfully chased the 109 and, while the other flight was halfway through a 360 degree turn, two Me 262s came in on the tail of the rear plane. As the P-38s broke to the left the first jet aircraft pulled up into the haze. The second enemy plane continued firing at the tail of the rear P-38. As the lead P-38 got into position for firing, the jet fighter pulled up at a steep angle and disappeared. The Me 262 appeared to have had trouble in slowing down to stay with the P-38. It was believed by the Lightning pilots that the 109 might have been employed as "bait" to draw them away from the photo plane.

9 FEBRUARY: In increased activity, some twelve jets attacked 8th Air Force heavies, mostly in the Fulda area, north of Frankfurt. At least one B-17, 447th Group, was damaged, and fighter victories were claimed by five pilots:

Me 262	Capt Edwin H Miller	78th FG (8) Fulda*
Me 262	Lt William E Hydorn	78th FG (8) Fulda
Me 262	Capt Donald H Bochkay	357th FG (8) Fulda
Me 262	Lt Johnnie L Carter	357th FG (8)
Me 262	- Stephen C Ananian	359th FG (8)

The victory claim for Capt. Miller (*) was subsequently changed from a Destroyed enemy aircraft to one Probably Destroyed. Reporting on the engagement, the former flight commander of the 83rd Squadron, 78th Group, states:

"On February 9th, 1945, an Me 262 was approaching the box of bombers which we were escorting. I called the bounce from approximately 22,000 feet, diving on the 262 which was flying 14,000 feet below. I began firing at an extreme range, knowing that he would out-distance me the moment that my wing man and I were spotted. So on the first long burst the right engine began to smoke and the jet rolled over falling through a cloud bank, and we were unable to follow and confirm the victory. This was considered a 'Probable' which appears on my record,"

The victory scored by Capt Bochkay was also accomplished during the escort, at 30,000 feet.

15 FEBRUARY: No aerial victory claims for this day, but B-24 Liberators of the 15th Air Force carried out an attack on the Messerschmitt jet factories in the Regensburg area during which they destroyed some 23 Me 262s on the ground.

22 FEBRUARY: The 8th Air Force, in conjunction with the 9th Air Force, 15th Air Force, American First Tactical Air Force and British Second Tactical Air Force, struck at a large number of key marshalling yards across Europe in Operation CLARION. The 8th dispatched 1,4-11 heavies to attack 25 key transportation centers located in towns of 15,000 to 25,000 population; of these 1,359 heavies attacked some 33 transportation targets in Germany protected by all 15 fighter groups of the 8th AF. Eight of the escort groups encountered small, widely scattered forces of jet aircraft, some 40 to 50 in the target areas. Of these, four were claimed destroyed and 13 damaged against the loss on one P-51. One B-17 of the 1st Division was shot down by a lone Me 262. Victors for the day were:

Me 262	Lt Oliver T Cowan	365th FG (9) Duren
Me 262	Lt Charles D Price	352nd FG (8) Leipzig
Me 262	(Maj Blickenstaff)	353rd FG (8)
	(Capt Gordon Compton)	
Me 262	(Lt Kirby)	355th FG (8)
	(Capt Stevens)	

It should be noted that although 8th Air Force records state its fighters destroyed four enemy jets on

this day, only three of these claims have been identified. No information has so far become available on the probable fourth jet kill.

The single 9th Air Force victory was accomplished by 1st Lt. Oliver T. Cowan, flying a P-47 with the 338th Fighter Squadron of the 365th Group. The action took place at 1740 hours, and he tells how he disposed of the Me 262 in his combat report.

"I was flying Elwood White Leader when Me 262s were reported slightly NW of Duren strafing the Pier-Duren Highway. We were soon in this area and saw one of the jet planes strafing west of us. After evading intense concentrations of our own flak, we had him below us. Red Flight was about 7,000 to 8,000 feet when they made contact. The jet started to climb, but Elwood Red Leader had altitude and headed him off. My flight at 11,000 feet worked east so as to intercept him as he started for home. Soon the jet began to head east toward home while two members of Red Flight were chasing and firing on him.

"The jet was pulling away from them but didn't seem to want to turn and he couldn't dive too steeply. He appeared to want to climb, but we already had altitude on him. When the jet started to pull away from Red Flight, I took my Number Two, leaving Three and Four as top cover, and started down. I pushed everything forward and went down with water injection. At approximately 5,000 feet we were doing 530 miles per hour. I do not believe the jet pilot saw me until too late. I shallowed my dive, pulled my nose through and gave him a burst from my guns. He then dropped out of my sight at 300 feet altitude. I lowered my nose and saw him crash into the ground. When he crashed, I observed a puff of black smoke but no flame. After the smoke drifted away I could see the small pieces of wreckage from the jet plane scattered over a wide area as though it had exploded on impact. I'd fired 250 rounds."

23 FEBRUARY: No jet victories recorded for this day, but 8th Air Force fighters reported seeing a few jets over Germany—they all declined combat.

25 FEBRUARY: On this red letter day, the 55th Fighter Group set a record that was not to be surpassed during World War II when P-51s from the Group destroyed seven jet aircraft in one day. To add to the records, it would appear that the 364th Fighter Group's victory over an Arado Ar 234 was the first against this type scored by the 8th. The day's victors were:

Me 262	Capt D M Cummings	55th FG (8) G'hels't
Me 262	Capt D M Cummings	55th FG (8) Leipheim
Me 262	Capt Penn	55th FG (8) G'bels't
Me 262	Lt Anderson	55th FG (8) G'bels't
Me 262	Lt Clemmons	55th FG (8) G'bels't
Me 262	Lt Menegay	55th FG (8) G'bels't
Me 262	(Lt O'Neil)	55th FG (8) G'bels't
	(Capt Birtcliel)	
Me 262	Lt Carl G Payne	4th FG (8) Naunburg
Ar 234	(Lt E Murphy)	364th FG (8)
	(Lt White)	

The 55th Fighter Group had been on a fighter sweep when its 38th Squadron came across a number of Me 262s taking off from Giebelstadt Airdrome at 1000 hours. The Mustangs bounced them and shot down six jets. Twenty minutes later, Capt. Donald M. Cummings became the second AAF pilot to destroy two jets when he found one over Leipheim Airdrome. His combat report tells the story:

"I was leading Hellcat Yellow Flight on a fighter sweep at 10,000 feet in the vicinity of Giebelstadt A/D when several Me 262s were called in at 9 o'clock, taking off from the field. Capt. Penn, the Squadron Leader, ordered us to drop our

tanks and engage the enemy. I peeled off from 10,000 feet, making a 180 degree turn to the left in a 70 degree dive after a jet which was then approaching the airdrome. I commenced firing from approximately 1000 yards in a steep, diving pass and after about three seconds observed many strikes. Since I was closing fast and approaching the airfield, which was beginning to throw up intense and accurate flak, I broke left and up, taking evasive action when about one-third of the way across the field. My wingman, who was behind me, saw the e/a touch ground, cartwheel and burn.

"During the above engagement my Number 3 and 4 men had become separated from the flight, so my wingman and I set out on a course of 180 degrees at 5,000 feet in search of ground targets. Near Leipzig A/D we spotted an unidentified aircraft crossing the SW corner of the field at 4,000 feet; 150 degrees. We increased our speed and closed on the e/a which we identified as an Me 262 with dark camouflage and large crosses on the wings. As I came in range, the jet made a sharp turn to the left, losing altitude. When I followed him, closing slowly, he started to let down his nose wheel, apparently attempting to land. Closing further to 400 yards, I commenced firing. The first burst missed, but when the jet attempted to turn to the right I gave it to him again at about 10 degrees deflection and observed many strikes. Large pieces of the e/a began to fly off and the fuselage exploded behind the cockpit. The 262 then rolled to the right and went straight in from 800 feet, exploding when it crashed.

"Ammunition expended-1250 rounds."

The victory of 1st Lt. Carl G. Payne, of the 334th Fighter Squadron, 4th Group, was gained between 1040 and 1100 hours, 4 miles SE of Naunburg. His combat report stated:

"I was flying Cobweb Blue 3 on a strafing show. We were ten minutes SW of Leipzig at 8,000 feet when I spotted an Me 262 at about 5,000 feet and at 1 o'clock. I peeled off on him, calling in at the same time. I closed to about 400 yards and opened fire, holding it until about 100 yards. I hit him and knocked out his left jet. I overshot and pulled up to the right and made another pass.

"I was not hitting him as I should, so I moved up to 10 to 30 feet behind him and started firing. He exploded and covered me completely with flames. After I hit him the first time, he went to the deck and stayed there until he exploded."

An idea of the problems faced by the pilots flying the Blitz Bombers, and some of their tactics in February, can be gathered from the reports of one such pilot who was captured by the Allies. Certainly the briefing of Blitz Bomber pilots for a mission was a farce, and they needed more than a little luck to survive a sortie that left them almost always on their own initiative in decidedly hostile skies. It is indicative of the quality of the Me 262 that a good percentage of these men did return from their missions.

Briefing usually was very short, lasting from 5 to 10 minutes. Information given was concerned only with the target and its location. There was no orientation on flak or other factors affecting the mission. Pilots were left to figure out their routes to and from the target and the altitudes to be flown.

The deepest penetration Me 262s made with bombs was 160 miles, flying at an altitude of 13,000 feet. The formation flown to the target usually was of four planes abreast with 80 to 100 feet between wingtips. Speed to the target was about 420 miles per hour. The usual route altitude was 13,000 feet, and each plane carried two 550-lb. bombs under the nose. Previous to February.

1945, Hitler's personal order forbade any Me 262 bomber flying under 13,000 feet. The serious effect of this flying altitude on bombing accuracy caused continual complaints from the pilots, but it was not until the end of January that the order was changed to allow pilots to go down to any altitude they considered safe.

When Allied fighters were encountered en route to the target, the Me 262s usually increased speed and easily climbed away. Flak was evaded rather easily by increasing speed and weaving from side to side.

The maximum diving angle of the Me 262 with bombs was 35 degrees. Pilots dived down from 13,000 feet to 3,200 feet but never much lower. Care was exercised to prevent the air speed indicator from going over 570 miles per hour since the Me 262 was red-lined at 590. Care also was exercised to empty the 150 gallon fuel tank in the rear of the fuselage before the dive. This was necessary because release of bombs with full rear tank caused the nose of the plane to go up very suddenly, either knocking out the pilot or throwing the plane into an uncontrollable spin. The Me 262 pilots used the old "Revi" bombing sight which supposedly was accurate to within 110 to 130 feet. Following release of their bombs, the Me 262s returned home at altitudes between 3,200 and 4,000 feet with a distance of 200 to 300 feet between planes.

MARCH 1945

The long gestation period for the German jets came to an end in March, and Me 262s began making well coordinated and aggressive attacks on AAF heavy bombers in comparatively large formations. They deliberately avoided the escort fighters and pressed attacks only when the escort was not in the immediate vicinity of the bomber formation. During March, 8th AF fighters had 438 encounters with the jets leading to 280 combats and claims of 43-3-45 in the air. They claimed 21 jets destroyed on the ground and 11 damaged. Bombers of the 8th had 199 encounters with the jets, 159 combats and claimed 20-12-31. Known losses to jet aircraft were 2 fighters and 24 bombers.

Early attempts to attack the heavies from the front had been abandoned because of the tremendous closing speeds. Now the Me 262s made their attacks in company front from the rear, taking advantage of cloud cover whenever possible. The company front formation attacked from slightly above and behind the heavy bombers, hedgehopping over the bomber formation from the rear to the front by diving slightly on each bomber and rising to dive on the next. In a 36-plane formation, Me 262s flew in three waves with 12 jets in each wave. If the last two waves were attacked by escort fighters, the jets broke away in a slight dive in two-plane elements. In order to break down the formation from a 12-plane wave into two-plane elements, the Me 262s broke away laterally rather than horizontally.

Along with cloud cover, the jets also liked to attack from 4 to 6 o'clock low, out of the contrails. In one case, four Me 262s in a formation similar to that used by AAF P-51s came out of the clouds and bomber contrails from 5 o'clock low, closed from 75 yards to almost point blank range and badly damaged three bombers in the first pass. A second pass made by the three Me 262s from 6 to 7 o'clock resulted in the entire tail section of one B-17 being shot off.

For the bomber crewmen, Me 262s were usually encountered between 25,000 and 29,000 feet. The first visual sign of an impending jet attack was a long column of smoke, resembling that of a rocket, some five or six miles away. At first only the smoke trail could be seen as it appeared level with the bomber formation as the jets circled to gain more altitude. The trail continued

in a climbing spiral until the jets were from 500 to 1,000 feet above and behind the bomber formation. From this position the 262s peeled off and attacked. As the jets came within range they appeared to slow down momentarily when firing their guns and then pass on over the bomber formations. After the first pass, and if Allied fighters didn't interpose, the jets flew ahead of the formation for five or six miles and began another long climbing spiral back to the rear of the formation in order to get into position for another pass.

To implement the defense against the growing threat of the German jet fighters, the 8th Air Force began "capping" operations on a full scale. In these operations, designed to protect the bombers by keeping the jets from making attacks, a fighter squadron or group was given a particular area to patrol. This area consisted of one or more known operational airfields that handled jets, and 8th fighters placed themselves above such facilities ready to pounce on any jets if they took off to intercept the bombers—or, for those that succeeded in attacking the bombers, to pounce on them when landing after an operation. Since the jets were most vulnerable during takeoffs and landings, "capping" operations met with considerable success, aided by the shrinking German perimeter within which were only a limited number of airfields.

1 MARCH: The month of March opened quickly with two jets falling to 8th fighters on the first day.

Me 262 Lt John K Wilkins Jr 355th FG (8) Ingols't
Me 262 Lt Wendall W Beaty 355th FG (8)

The victory in the Ingolstadt area was accomplished by a member of the 355th Group Scouts, 1st Lt. John K. Wilkins, Jr.

2 MARCH: Some 35 jet aircraft, flying in elements of 2 and 3, attacked 8th heavies in the Dresden area where one kill was claimed, but the big action in kills fell to the P-51 flying 354th Fighter Group of the 9th AF.

Me 262 —Robert C Havinghurst 339th FG (8)
Me 262 Capt Bruno Peters 354th FG (9) Kassel
Me 262 F/O Ralph Delgado 354th FG (9) Kassel
Me 262 Lt Theodore Sedvert 354th FG (9) Wiesthal

The first two 354th victories were scored over a German airdrome in the Kassel area. Capt. Peters dove from 12,000 feet through haze and 6/10 overcast to catch the first Me 262 at 1,500 feet and send it crashing down. F/O Delgado pursued and scored many strikes on a second jet before the pilot bailed out.

Lt. Sedvert observed a Blitz Bomber drop a bomb on Osthofen and bounced the enemy aircraft from behind, getting strikes in the tail and fuselage. The 262 fled and Lt. Sedvert chased it to the east past the Rhine River. When the jet slowed down he found himself out of ammunition, whereupon he flew alongside the jet in utter frustration and fired his pistol at it. Almost immediately the Me 262 began to smoke, from earlier hits, and it bellied in near Wiesthal.

3 MARCH: Better than 50 Me 262s and Me 163s attacked heavy bombers of the 8th operating against Magdeburg and Runland, claiming 3 bombers and some or all of 6 fighters lost that day. Despite this heavy action, 8th fighters apparently made no claims for jets destroyed although a number of Me 262s were claimed damaged—at least one each by members of the 4th, 355th, 353rd and 339th Groups, and two by the 357th Group.

Following the heavy action on this day, jet action remained relatively quiet for the next ten days.

13 MARCH: On this date the 388th Fighter Squadron of the 365th Group, 9th Air Force, met up with four Me 262s northeast of Cologne. The result:

Me 262 Lt Marling 365th FG (9) Cologne

Lt. Marling, with Lt. Dahlen, surprised one of the 262s, fired when within range and caused the jet to explode and burn.

14 MARCH: With 8th heavies operating against a number of targets in Germany, scattered jet flights attacked the bombers, some reported employing rockets. Although there is no report on losses to the jets, the following victories were scored:

Me 262 Lt John W. Keeler 56th FG (8) Muritz Lake
Ar 234 Lt Norman D Gould 56th FG (8)
Ar 234 (Lt Warren S Lear) 56th FG (8)
(Lt Sanborn N Ball Jr)
Ar 234 Capt D S Bryan 352nd FG (8)
Ar 234 Capt Robert E Barnhart 356th FG (8)

Flying with the 63rd Squadron of the P-47 equipped 56th Fighter Group, Lt. Keeler reported his victory in the following words:

"...It occurred near the Muritz Lake area north of Berlin. I was flying Number 3 position in a flight led by Lt. Paul Dawson. It was a fighter sweep mission (to Holzwickede) ahead of the B-17s and B-24s.

"An Me 262 passed less than 100 feet beneath our flight while we were orbiting at about 22,000 feet. I called the bounce and led the flight after the German jet. The Jerry spotted us coming in and began to pull away. We were ready to break off the chase when he started a turn. He continued in the turn until I had closed the distance between us to less than 200 yards. I fired a long burst and saw the right wing of the Me 262 explode. The jet snapped and plunged downward in flames.

"Our flight had become strung out in the chase and had dropped down between the leading 262 and one flying some 1000 yards in trail. This second German jet scored a hit in the wing of Lt. Dawson's P-47 before breaking away from the fight."

Meanwhile the two other victories scored by the 56th Group were notched by pilots of the 62nd Squadron.

15 MARCH: Aircraft of the 8th encountered about six Me 163s in the Leipzig-Kassel area on this day with one being claimed:

Me 163 Capt Ray S Wetmore 359th FG (8)

Although the records of K.G. 400 have not been checked, it would seem possible that at least one other Me 163 was also destroyed on this day.

Following 15 March, the 8th Air Force took a day off on the 16th and met little or no jet activity on the 17th.

18 MARCH: On what was undoubtedly the most successful day ever experienced by the German jets, 37 Me 262s were sent up to attack bombers of the 8th Air Force in spite of very bad weather conditions. The Luftwaffe record claims that these Me 262s made thirteen sure kills and two probables while losing only two of their number. All of this took place in the Berlin area with the jets attacking in a basic 36-plane formation.

It would seem probable that the two Me 262s lost fell to the guns of the bombers, for no jet kills were claimed by 8th fighters. The only known claim was for the damage of one Me 262 by the 356th Fighter Group.

19 MARCH: Jet interceptions claimed three Flying Fortresses in the Leipzig area on this day, and 8th Air Force fighters made up for their failure to score a victory claim on the preceding day. Five victories were recorded by the following:

Me 262 Maj Robert W Foy 357th FG (8)
 Me 262 Capt Fifield 357th FG (8)
 Me 262 Maj Niven K Cranfill 359th FG (8) Leipzig
 Ar 234 (Capt W H Brown) 78th FG (8)
 (Lt Lamb)
 Ar 234 (Lt Parker) 78th FG (8)
 (Lt Rosenblum)

20 MARCH: Heavy bomber forces of the 8th Air Force attacking Hamburg were intercepted by an estimated 10 Ar 234s and 30 Me 262s which attacked for 30 minutes in the target area. The Ar 234s (which were possibly used to attack the bombers for the first time on March 14th) flew a formation of seven aircraft at 27,000 feet with the three others as top cover at 29,000 feet. Attacks were made singly and, although there are no records to confirm it, it is possible the Arados used rockets in their attacks. Though attacks by both jet types were aggressive and persistent, only two bombers were lost while 8th bomber and escort claims were 8-3-12. Of these the fighters claimed three destroyed and at least five damaged, including two Ar 234s, by the 4th Fighter Group. Victory claims were:

Me 262 - Vernon N Barton 339th FG (8)
 Me 262 - Robert E Irion 339th FG (8)
 Me 262 - Nile C Greer 339th FG (8)

Barton and Greer were from the 504th Squadron and Irion from the 505th Squadron-339th Group.

21 MARCH: In response to the increased tempo of operations by the German jets, 8th heavies began a concentrated program against their bases which lasted from the 21st to the 24th of March. During these days, 31 of 51 primary targets for the bombers were airfields--virtually all fields from which jets were capable of operating were struck.

On 21 March jets attacked 8th formations with units of various sizes, 12 to 14 attacking B-17s over Plauen. In this engagement, one Me 262 shot down a B-17, attacked a Fortress from the 850th Squadron, 490th Bomb Group, from 6 o'clock low, and was destroyed by tail gunner, S/Sgt. William H. Cole. His burst apparently killed the jet pilot, for the Me 262 did a half roll over his aircraft and crashed into the waist section of a B-17 in the element above.

For their part, the 8th fighter boys had a good day claiming nine jets, as follows:

Me 262 Capt Edwin H Miller 78th FG (8)
 Me 262 Lt Anderson 78th FG (8)
 Me 262 Lt Bourque 78th FG (8)
 Me 262 Lt Kirk 78th FG (8)
 Me 262 Lt Rosenblum 78th FG (8)
 Me 262 Lt Kuehl 78th FG (8)
 Me 262 Lt Harry M Chapman 361st FG (8)
 Me 262 Pilot-Unknown 361st FG (8)
 Me 262 - Billy E Langohr 339th FG (8)

Of his engagement, Capt. Miller (who scored the probable on 9 February) reported:

"We were flying escort when an Me 262 approached the rear box of bombers and began leap-frogging through the entire group, scoring several hits. He then veered off, returned, and started attacking the rear box again. By this time we were on his tail. I tried a long shot and could see strikes all over his left wing which immediately caused him to lose speed. My wingman and I then were able to close on him, and I scored several strikes on both wings and the fuselage. The Jerry then peeled out and proceeded to head for the deck, and I was following him all the time firing as we went. We broke through a scattered undercast and I was sitting right on his tail until my guns were completely empty. By that time I knew he was a 'dead Duck'

and veered off to the left, pulling up just as he crashed into the ground."

22 MARCH: While the 8th Air Force continued pounding at the Luftwaffe's jet fields and drawing a measure of wrath from the jets themselves, the 15th Air Force dispatched a formation of B-17s to attack the oil refinery at Ruhland, south of Berlin. With P-51 escort, this force drew a reception of from 20 to 40 jets which accounted for the destruction of three Fortresses.

Me 262 Lt Stutzman 78th FG (8)
 Me 262 Lt Peal 78th FG (8)
 Jet Pilot-Unknown 55th FG (8)
 Me 262 Capt Barnaby 78th FG (8)
 Me 262 Capt William J Dillard 31st FG (15)

Flying with the 308th Fighter Squadron of the 31st Group, Capt. Dillard latched on to an Me 262 attacking the 15th's bombers and chased him down to the deck in a long dive that ended with his Mustang beginning to close in. Then, in Dillard's words, "I never did see any strikes from my bullets, but some pieces flew off and his left engine caught fire. The pilot flubbed his jet around a bit and then flipped over and bailed out."

Besides this single victory, 15th AF Mustangs also damaged five Me 262s.

24 MARCH: There was no Luftwaffe response to the 8th's activities on March 23rd, and on this day the 8th was engrossed in covering and supporting the Rhine crossings of the Allied armies. However, the jets were not without their defensive chores as the 15th Air Force carried out an attack with B-17s against Berlin that led to the 15th's one big victory day against the German jets. The scoring pilots, all flying P-51s, were:

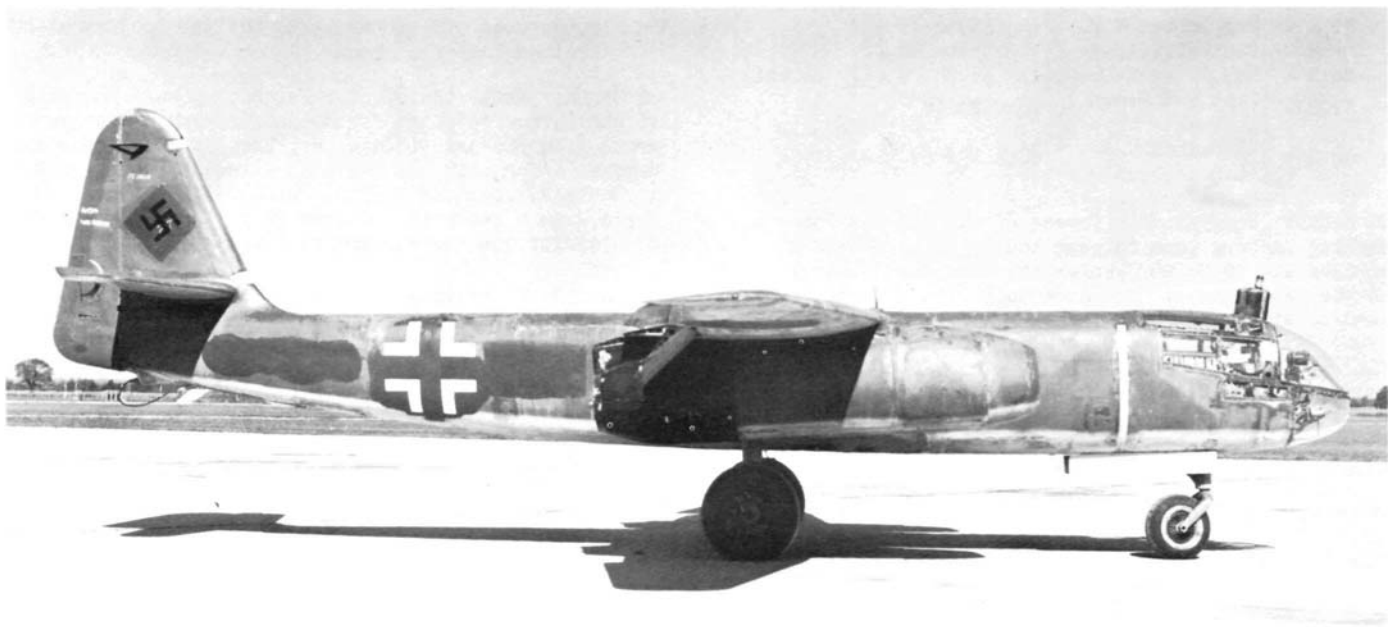
Me 262 Col William A Daniel 31st FG (15)
 Me 262 Capt Kenneth T Smith 31st FG (15)
 Me 262 Lt William M Wilder 31st FG (15)
 Me 262 Lt Ray D Leonard 31st FG (15)
 Me 262 Lt Forrest M Keene Jr 31st FG (15)
 Me 262 Lt Roscoe C Brown 332nd FG (15)
 Me 262 Lt Earl R Lane 332nd FG (15)
 Me 262 F/O Charles V Brantley 332nd FG (15)

Just as the two previous 15th AF jet victories were scored by pilots of the 31st FG's 308th Squadron, all five 31st victories on this day were scored by pilots flying with the 308th. Col. Daniel, although Group CO, was leading the 308th when the jets went for the B-17s. Diving on the tail-end Charlie of an Me 262 formation, Colonel Daniel fired a long range burst that sent the jet into a snap roll after which the plane exploded.

2nd Lt. William M. Wilder, told of seeing his CO's victory, saying, "I saw the jet go spinning through the air, and then there was just a big blob of smoke where it had been." After this, Wilder found himself in firing position on an Me 262 just as it started a pass at the bombers. "I hit the right engine and a lot of smoke began coming out. The Jerry bailed."

Capt. Smith tagged on to a jet and chased it away from an attack on the bombers, firing as he went. While he was still firing, the German pilot hit the silk. 1st Lt. Ray D. Leonard also intercepted an Me 262 as it was attacking the bombers. His fire went in true, started the jet smoking, and it pulled up in a slight climb to the left. Brown kept shooting as pieces fell off and both engines caught fire, then the enemy pilot bailed out. At about the same time, Lt. Keene was scoring on another 262, but his victory was not confirmed until four days later after a study of his gun camera film.

In the first victory scored by the 332nd Fighter Group, 1st Lt. Roscoe C. Brown took after some jets only to find them gone when he arrived in the area where he had seen them. Then, to his amazement, when he looked behind he found one 262 tacking onto his



An Arado Ar 234B-2, Werke Nr. 140 312, with RF2C periscope installed over pilot's position. (Photo-Wright Fld)

tail. He immediately fainted to one side and broke to the other. This caused the jet to overshoot, and he slid onto the 262's tail. Brown closed in and fired several bursts into the enemy plane after which the pilot took to his parachute and the jet spun to earth.

Flight Officer Brantley didn't know it when he scored his victory. Firing on his adversary, he saw strikes on the fuselage, but, as he closed in for more shots, the jet nosed over and Brantley went past it. Other pilots with him saw the Me 262 continue its dive to crash into the ground. The final victory for the 332nd was scored by 1st Lt. Earl E. Lane when he followed an Me 262 in a dive that started at 20,000 feet and ended at 6,000 feet with Lane firing repeated short bursts that set the jet on fire. Fellow pilots described the Me 262 as belching black smoke and out of control as it continued screaming toward the ground.

25 MARCH: The 8th Air Force returned to killing jets on this day with four falling to the following pilots:

Me 262	Lt Edwin M Crosthwait Jr	56th FG (8)	Hitz'r
Me 262	Capt George E Bostwick	56th FG (8)	Hitz'r
Me 262	Lt Eugene E Wendt	479th FG (8)	
Me 262	Lt Raymond H Littge	352nd FG (8)	

The two 56th Fighter Group pilots scored their victories during a Ramrod to Hitzacker.

30 MARCH: After four days of little jet activity, the 8th Air Force ran into 30 jets in the Hamburg area. However, these aircraft did not attack the bombers, but five did manage to get in the way of 8th fighters.

Me 262	-Robert F Sargent	339th FG (8)
Me 262	- Carroll W Bennett	339th FG (8)
Me 262	(Lt. Guy)	364th FG (8)
	(Pilot-Unknown)	352nd FG (8)
Me 262	Lt Kenneth J Scott Jr	361st FG (8)

Me 262 (Col John D Landers) 78th FG (8)
(Lt Thain)

Besides his victory, Carroll W. Bennett of the 504th Squadron, 339th Group, also damaged an Me 262.

31 MARCH: Large jet formations were observed on this day but only one attack materialized on the 8th's heavies in which a single B-24 was knocked down by a 262.

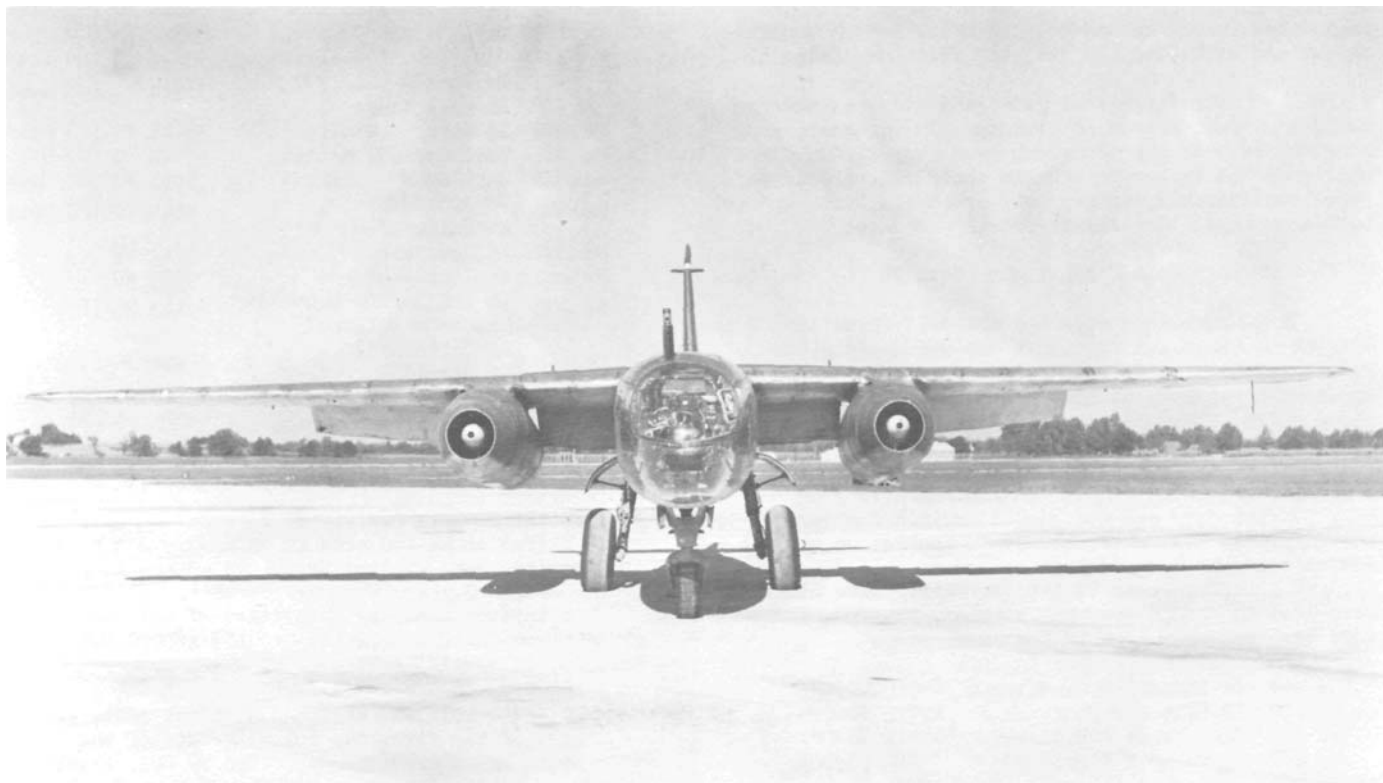
Me 262	Lt Tordoff	353rd FG (8)	Derben
Me 262	Capt William T Bales Jr	371st FG (9)	

Capt. Bales of the 404th Squadron, 371st, flying a P-47 caught an Me 262 on takeoff and shot it down. He was lost in action 13 days later.

APRIL 1945

The struggle between the German jets and the AAF reached its climax during April in The Great Jet Massacre of the 10th, and by the end of the month the Luftwaffe and its jets were all but run out of the sky. During April the fighters of the 8th Air Force had 319 encounters with the jets and 234 combats in which they claimed 56-5-67 in the air. Their ground claims were 46 jets destroyed and 18 damaged. Bombers of the 8th AF had 169 encounters during the month and 148 combats in which they claimed 36-31-19. No fighters were known to be lost to the jets, but at least 24 heavy bombers were so lost.

In the years since World War II, one story concerning the Me 262s has repeated itself again and again with each teller giving a somewhat different version. The incident referred to occurred in either April or March 1945 when some six or more Me 262s took off to intercept Allied bombers, each carrying 24 R4M, special air to air, rockets under its wing. These Me 262s purportedly attacked a formation of heavy bombers and shot down from 12 to 18 of them with the new super-weapon.



An Ar 234B-2 seen from the front. The periscope was used for bomb aiming or as a rearward gun sight. (Wright Fld)

However, every attempt to track down the validity of this story, to determine exactly if it was heavy or medium bombers that were attacked, and to establish the true date (even a date when such a goodly number of bombers were lost in one day) has failed.

The story still needs qualification as the last development step in jet warfare during WW II, but there is enough evidence to assume that the Me 262 equipped with a new gyroscopic gunsight and R4M rockets was a weapon that met a long standing need of German air defense. It could take an exorbitant toll of attacking bombers without suffering serious losses. That it did not achieve more was occasioned by the fact that the rockets and the gunsight were just emerging from the test stage as World War II drew to a close in Europe.

3 APRIL: After little jet activity on Eastern Sunday, the 1st, and the 8th Air Force being held down by weather on the 2nd, the German jets put in a quick appearance in the Kiel area on this day. The three 8th fighter victories were all claimed by the same group:

Me 262	-- Nile C Greer	339th FG (8)
Me 262	-- Kirke B Everson	339th FG (8)
Me 262	-- Harry R Corey	339th FG (8)

The victory scored by Greer made him the third 8th Air Force fighter pilot to destroy two jets.

4 APRIL: Among other targets, the 8th attacked six important jet fields and Luftwaffe control stations in north central Germany. Some 50 jets arose to do battle and shot down 5 heavy bombers and one Mosquito. The latter was flown by Col. Troy W. Crawford, CO of the 446th Bomb Group, who was checking his Group's formation in an attack on Wesendorf A/D when he was shot down. He survived the experience as a POW. Fighter victors for the day were:

Me 262	Lt Michael J Kennedy	4th FG (8)	Ludwigs't
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FALL - 1963

Me 262	Lt Raymond A Dyer	4th FG (8)
Me 262	Shared, 4 Pilots	4th FG (8)
Me 262	Lt Russell S Kyler	56th FG (8)
Me 262	-- Robert C Croker	339th FG (8)
Me 262	Maj Robert F Ceullers	364th FG (8) Leipzig
Me 262	Pilot-Unknown	361st FG (8)
Ar 234	Lt Riffle	355th FG (8)

Lt. Kennedy's victory came at 0945 hours, 5 miles south of Ludwigslust over 8/10 cloud cover. In his combat report he states:

"We were escorting a box of B-24s when all of a sudden 8 Me 262s attacked our bombers. Two of the jets pulled up after making their pass, two others pulled the old 109 tactic of doing a Split-S after their pass and the other four used little or no evasive action. I was at 18,000 feet at the time and picked out one that started a gradual descent in a gentle starboard turn. Having run into 262s before, I started down after him (in my P-51D, QP-K, Lil Aggie) leading the German pilot quite a bit. For what seemed a very long time I pointed my aircraft at a non-existent point hoping that I had planned correctly. Then all of a sudden it happened. I had increased my air speed, gained on him and I was on his tail at extreme K-14 gunsight range. I opened fire and immediately observed strikes in the wing and the right engine nacelle. The right jet disintegrated and I flew through some of the bits and pieces and began to over run the plane. I pulled off power, dumped combat flaps and went right on by him. I pulled into a tight port orbit and just as I started to pull around, my wingman informed me that the Me 262 had exploded. I'd fired 607 rounds of API ammunition."

The 364th Fighter Group ran into 8 Me 262s attacking the bombers at 29,000 feet over Hamburg. They broke up this attack, and when the jets dispersed Major

Ceullers tagged on to one making a run for it. The chase that ensued lasted for 182 miles before Ceullers caught and clobbered the jet, 400 feet over Leipzig.

5 APRIL: Small flights of jets made quick attacks on the 8th's heavies over SE Germany. In one case, an abortive B-17 of the 92nd Bomb Group was flying alone when attacked by two Me 262s in the Ulm area. It suffered considerable damage, jettisoned its bombs and returned to base. One fighter claim was made:

Me 262 Capt John C Fahringer 56th FG (8) Reg'burg

This Me 262 had attacked the B-17 formation of the 401st Bomb Group and shot down one B-17 before Capt. Fahringer cut him off and scored strikes on him just north of Regensburg at 1130 hours. The jet ducked into cloud cover as he was hit, but Fahringer followed him through, got more hits and the German pilot bailed out.

7 APRIL: Following little enemy air activity on the 6th, 50-plus jets and 200 piston engined fighters of the Luftwaffe went after the 8th's heavies on the 7th. Action occurred over central and northern Germany but brought little success to the Luftwaffe. Two Liberators were lost to suicide-ramming attacks, however, and two more were probably lost to the jets.

Me 262 Lt Richard D Candelaria 479th FG (8)
Me 262 Lt Hilton O Thompson 479th FG (8)
Me 262 Capt Verne E Hooker 479th FG (8)
Me 262 - Oscar K Biggs 339th FG (8)
Me 262 Shared, 3 pilots 355th FG (8)

Lt. Candelaria, flying a P-51 for the 435th Squadron, 479th Group, didn't just shoot down a single jet this day, he also waded into a bunch of 109s attacking the bombers and knocked four of them down--getting 5, all told, for the day. The 3 pilots sharing an Me 262 for the 355th Group were Lts. Reiff, Griswold and Hartzog.

In the bombers, this day, a number of gunners claimed the destruction of Me 262s--S/Sgt. Willard E. Adler, nose gunner in a B-24 of the 453rd Group, got one in the Luneberg-Hamburg area; and Sgt. Weaver L. Reckland, top turret gunner in a B-17 of the 388th Group, shot down an Me 262 at about 100 yards range over Oranienburg. Over Duneberg, near Hamburg, a damaged, probable 262, crashed into the Deputy Lead B-24 of the 389th Group who in turn crashed into the Group Lead and all three aircraft were destroyed.

8 APRIL: With the 8th AF hitting central Germany, the Luftwaffe stayed on the ground, but a pilot of the 9th Air Force kept the jets falling while on a ground support mission near Crailsheim, Germany.

Me 262 Lt Lloyd L Johnson 50th FG (9) Crailsheim

9 APRIL: The 8th Air Force struck at Control Stations and jet airfields in southern Germany and met some jets. Only one kill was reported.

Me 262 Lt Moore 55th FG (8)

10 APRIL: In violent action over northern and central Germany 50 jets knocked down 10 heavy bombers but 8th fighters extracted a grim toll in what will be forever known as The Great Jet Massacre, getting 20 Me 262s in the air. (On the ground they did well, too, destroying 297 enemy aircraft.)

Me 262 Capt John K Brown 20th FG (8) Oran'b'g
Me 262 F/O Jerome Rosenblum 20th FG (8) Oran'b'g
(Lt John W Cudd)
Me 262 Lt Albert B North 20th FG (8) Oran'b'g
Me 262 Lt Walter T Drozd 20th FG (8) Oran'b'g

Me 262 Capt John K Hollins 20th FG (8) Oran'b'g
Me 262 Capt Gordon Compton 353rd FG (8)
Me 262 Capt Robert W Abernathy 353rd FG (8) Kothen
Me 262 (Lt Jack W Clark) 353rd FG (8) Dessau
(Lt Wm A Mahan)
Me 262 Lt Wayne C Gatlin 356th FG (8) Oran'b'g
Me 262 Lt Thurman W Muldln 356th FG (8)
Me 262 Capt Wm F Wilkerson 56th FG (8) Oran'b'g
Me 262 (Lt Donald Henley Jr) 56th FG (8) Oran'b'g
(Lt Walter J Sharbo)
Me 262 Lt McGinnis 55th FG (8)
Me 262 Lt Lashbrook 55th FG (8)
Me 262 (Lt Col Earl Duncan) 352nd FG (8)
(Maj McAuliffe)
Me 262 (Lt Pritchard) 352nd FG (8)
(Lt Ricci)
Me 262 Lt Harold Tenenbaum 359th FG (8) Gard'g'n
Me 262 Lt Robert J Guggemos 359th FG (8) Gard'g'n
Me 262 Lt Wilmer Collins 4th FG (8)
1/2 Me 262 Lt C A Patillo 352nd FG (8)

Besides the 20 jets destroyed, 13 were damaged. Lt. Patillo shared an Me 262 with an unknown pilot of either the 55th or 364th Fighter Group, if preliminary information on the day's combats was correct.

An insight into the activities of this day can be gleaned from the 20th Fighter Group's report for Mission Ho. 303, 10 April:

"The 20th was assigned a choice spot, the escort of the first two combat groups of the 1st Division to Oranienburg. Led by Col. Robert P. Montgomery (A Group) and Capt. Robert H. Riemen-snider (B Group) the boys took off at 1150, crossed in over the Dutch Islands and rendezvoused with the Big Friends at Osnabruck at 1341. The target was bombed visually at 1438, and just after, 10-15 jets started to come through. Our boys were ready for them and in the mad scramble that followed scored 5-0-3. Some of the blow jobs were caught at altitude and chased to the deck, another was caught trying to land, another was shot down and crashed into the heart of Berlin."

Accounting for its victories, the 353rd Fighter Group reported that a lone Me 262 was seen stooging at 9,000 feet near Zerbst A/D which had just been clobbered by fighter-bombers. Apparently low on fuel, the Jet turned east when engaged by Seldom Flights and then made a 180 degree turn for a head on pass at Red Leader, Capt. Compton. The latter gave him a short squirt and the Me 262 burst into flames. The pilot bailed out at 6,000 feet, but although he cleared the plane his parachute never opened.

Seldom Green Leader, Lt. Clark, spotted another Me 262 in the Dessau area at 5,000 feet while he was at 10,000. He dove for the kill but the Me 262 pulled up into a steep, 60 degree climb. Clark pulled up, too, and had to close his throttle to keep from over-running the 262. He fired one long burst at 15,000 feet and blew the right engine off the wing. Then, at almost the same time, the left engine blew off from the attentions of his Number 4, Lt. Mahan. The German pilot bailed out, his chute opened and the Messerschmitt crashed into a canal, damaging two barges for one of the better carom shots of the war.

Another Me 262 came in from the east toward the bomber stream when in the target area. It was engaged by lower Red Leader, Capt. Abernathy, and after a short chase was destroyed just east of Kothen Airdrome.

Lt. Gatlin, 360th Fighter Squadron, 356th Group, reported his kill, 1515 hours, in this fashion:

"I was leading Vortex White flight escorting the 384th Bomb Group bombing Oranienburg. Just after bombing the target, jets were seen attacking the group ahead of ours. I was on the right hand side of the bombers going toward the tail end of

our box when I saw an Me 262 making a pass from 6 o'clock high to the bombers. He appeared to be hitting two stragglers and then continued in a dive right on down through the box. I made a 180 degree diving turn (Split-S) to the right and was able to cut him off very easily. I slid in on his tail as he continued his dive and opened fire at zero degrees deflection and 200 yards range. I observed hits all over the jet and continued firing as he started smoking. I kept on him until his dive became almost vertical and I had to break off in order to pull out. After leveling off a bit, I cocked my wing and saw where he hit and burned."

The two victories scored by pilots of the 359th Fighter Group were won over Gardelegen Airdrome.

During the interceptions in the Berlin area, the 13th Bomb Wing (made up of the 95th, 100th and 390th Bomb Groups) was in the thick of the action. One 262 came through the 100th formation, knocked down two of its B-17s, then came on for the 95th where Sgt. R. F. Lenahan, tail gunner, destroyed it. 95th gunners accounted for two other kills that day, possibly jets, while gunners in the 100th destroyed 4 jets and 390th gunners scored one as destroyed. Other groups and wings had similar stories to tell, and 8th bombers undoubtedly added anywhere from ten kills, on up, to the 20 kills of the 8th's fighters.

11 APRIL: On the day following the Massacre, it was not surprising that the Luftwaffe stayed on the ground while 8th bombers hit Southern Germany. However, the 15th Air Force kept things going with one kill.

Ar 234 (Lt Benjamin Hall) 52nd FG (15) Vipiteno
(Lt Cooper)

On this, the first and only victory for the 52nd Fighter Group, Lt. Hall first saw the Ar 234 near Vipiteno, Italy, and engaged it. The Arado continued flying straight and level until Hall set it on fire with bursts from 500 yards. As the jet went into a gentle dive, looking as though it might escape by pulling away from the pursuing Mustang, Lt. Cooper pulled in range and fired several effective bursts into its fuselage. The Ar 234 continued on down to crash into the ground.

14 APRIL: The 8th flew no operations on the 12th, only six bomb groups operated on the 13th, and few jets were seen. On the 14th and 15th, the 8th devoted its attention to the support of army units attacking pocketed German forces at Royan, France. On this day, however, the 9th Air Force contributed another jet kill:

Me 262 Capt Clayton Gross 354th FG (9) Lonnewitz

Captain Gross contacted and shot down his jet in the vicinity of Lonnewitz Airdrome.

16 APRIL: With the Luftwaffe virtually out of fuel and declining combat, 8th Air Force fighters went on a ground strafing spree claiming 721-0-373 enemy aircraft. In the air they shot down only three, including one jet. However, some jet forces did make contact with the bombers, and one report states that the 483rd Bomb Group was attacked by jets in the Ruhland area, claimed 11 of them and had three B-17s fail to return. The single fighter victory over the jets was:

Me 262 Maj Ryan 55th FG (8)

17 APRIL: 8th Air Force heavies bombed tactical targets in SE Germany and western Czechoslovakia in support of the advancing allied armies and ran into a number of jets. Me 262s, some 30 in number, hit the leading groups of the 1st Division without drawing blood, while some of these and other jets hit later groups from which several

bombers were seen going down by the 20th Fighter Group. In strafing attacks the 479th Fighter Group accounted for 8-0-3 jets on the ground. Aerial victors were:

Me 262	Capt Robert J Frisch	339th FG (8)
Me 262	- John C Campbell Jr	339th FG (8)
Me 262	Capt Robert DeLoach	55th FG (8)
Me 262	F/O Steiger	357th FG (8)
Me 262	Lt James A Zweizig	371st FG (9)

One of the easiest jet victories ever was scored by Capt. Frisch of the 503rd Fighter Squadron, 339th Group. He and his wingman spotted an Me 262 limping along with one engine out and gleefully dove to the attack on the "sitting duck". Before they could get in firing range, however, the German pilot bailed out,

Capt. DeLoach scored his victory while trailing along with the 338th Fighter Squadron, 55th Group, as a spare. In the Prague area an Me 262 was seen taking off by White Section of this Squadron. It then turned and came through the Section so fast no one could return its fire. Capt. DeLoach, however, was able to line up from his trailing position and made a head-on firing pass. His bullets struck the jet in the left engine causing it to catch fire. The Me 262 pilot promptly tried to land but cartwheeled and exploded in the attempt.

The victory scored by Lt. Zweizig was accomplished 1000 feet over an airfield in southern Germany.

18 APRIL: For the second day running the 8th operated in support of the Allied armies in southern Germany and Czechoslovakia, this time running into scattered jet flights. Victors for the day were:

Me 262	Maj Donald H Bochkay	357th FG (8)
Me 262	Capt Weaver	357th FG (8)
Ar 234	- Dale E Shafer	339th FG (8)

Major Bochkay's jet victory made him the fourth man in the 8th to destroy two jets.

19 APRIL: More tactical targets in the southern and eastern sections of Germany's crumbling fortress were hit on this day, and the last jet attacks were made on the massed bomber formations. Fighter victors were:

Me 262	Lt Col Jack W Hayes Jr	357th FG (8) Prague
Me 262	Lt Paul N Bowles	357th FG (8) Prague
Me 262	Lt Ofthsun	357th FG (8) Prague
Me 262	Capt Fifield	357th FG (8) Prague
Me 262	(Capt Ivan L McGuire Lt Weber)	357th FG (8) Prague
Me 262	Lt James P McMullen	357th FG (8) Prague
Me 262	Lt DeLoach	55th FG (8)

Acting as 357th Group Leader, Lt. Col. Hayes took the 363rd Squadron and swept far ahead of the bomber stream, which was on a mission to Pirna, and arrived over Ruzyně A/D, Prague, at 1150. Seeing no activity he circled up sun and then observed Me 262s begin to take off SE to NW in elements of two. Carefully, he let the Squadron down to 15,000 feet and after 16 jets were airborne the Mustangs bounced them destroying 4 and damaging 3 in the ensuing combats. Although they were being bounced, jets continued to take off until some 30 were airborne—each jet avoiding combat as much as possible by using their superior speed.

Lt. Col. Hayes' flight bounced one element as it took off. One Me 262 turned left and the other right, each pursued by elements of the flight. As the jet leader turned left, Lt. Col. Hayes got strikes on him, and the Jerry hit the deck with full power and crossed a river at the southern outskirts of Prague. Intense and accurate flak from both sides of the river met Hayes who had now lost his wingman. Still he pursued the jet which went out of sight temporarily behind a tall

building on the eastern shore of the river. As he pulled up over the building Lt. Col. Hayes saw the 262 hit the ground in a sharp turn to the right and the burning remains slide into a building. Hayes was then pursued himself by another 262 which he evaded by breaking sharply right and up. By this time the Me 262s were well dispersed throughout the Prague area.

Meanwhile, four Me 262s were making a pass at the bombers under escort by the rest of the 357th Group. Capt. McGuire, Green House Flight Leader, turned into the jets as two made tail attacks on the B-17s, coming in out of high cirrus clouds at 26,000 feet on the 4th box of bombers at 1225. They pressed their attack through the formation, shooting down one B-17, and then were pursued all the way to Prague by Capt. McGuire's flight. There, over Ruzyně, McGuire and 1st Lt. Weber destroyed one of the jets at 200 feet altitude. The Number 4 man of the flight, 2nd Lt. McMullen (on his second combat mission), trailed the other jet staying some 2,000 feet above him. Then he dove on him, fired a long burst and set fire to the jet's right engine at 1,500 feet. The enemy pilot quickly bailed out.

20 APRIL: Although little information has come to light concerning jet interceptions and attacks on medium bombers of the 9th or 12th Air Forces operating over Germany several incidents have been recorded. One of these is reported here, and it would be interesting to know just how many more there were, how many jets were downed by medium crewmen and how many mediums were lost to jets.

On this day, B-26 Marauders of the 9th Air Force's 323rd Bomb Group attacked a marshalling yard at Memmingen, east of Stuttgart. Just prior to the target, Me 262s attacked. As the jets first came in, Sgt. Edward S. Tyszkiewicz, top turret gunner, opened fire and destroyed one of the jets. Subsequently, a second Me 262 executed an attack against the same plane and Sgt. Tyszkiewicz destroyed this jet also. Enemy fire then severely damaged his plane and wounded Sgt. Tyszkiewicz but both plane and sergeant survived.

24 APRIL: The 9th Air Force scored its last known fighter victory of the war over the jets on this day.

Me 262 Pilot-Unknown 365th FG (9)

Major Hill was leading 16 P-47s of the 388th Fighter Squadron, 365th Group, on an escort to B-26s bombing Heilbronn when four Me 262s came up to attack the Marauders. The P-47s broke into the jets, broke up their formation and destroyed one and damaged two.

The same day, B-20s of the 34th Bomb Squadron, 17th Bomb Group, First Tactical Air Force, had a meeting with Me 262s. Three Marauders acting as chaff planes for a raid were hit by the jets, and two were shot down.

25 APRIL: The 8th Air Force flew its last heavy bomber missions of WW II on this day, and in the course of operations by 8th fighters, a final jet victory was scored.

Ar 234 Lt Hilton O Thompson 479th FG (8) Salzburg

In scoring this victory, Lt. Thompson became the fifth 8th fighter pilot to destroy two jets in aerial combat.

26 APRIL: The few remaining German jets continued after the medium bombers on this day. In attacks on B-26s of the 17th Bomb Group, two Me 262s were shot down by Marauder gunners of the 34th Bomb Squadron.

END OF APRIL: As April drew to a close, and the end of the war in Europe drew nigh, German jets all but faded from the sky—the disappearing last vestiges of a once proud Luftwaffe. The few that remained were ordered by Hitler to throw themselves against the advancing Russians, but in all probability only a few could even

manage this.

Before leaving April, it should be noted that there were two other victories in this month that have not been recorded because the exact date on which the claim was made has not been established. They are:

Me 262 Maj Johnson 325th FG (15)
Ar 234 Lt Leon Oliver 356th FG (8)

All that is known of Major Johnson's victory is that it was the twelfth and last victory scored by fighters of the 15th Air Force, and was the only jet victory scored by the 325th Fighter Group.

Lt. Oliver's victory claim is known to have been made sometime in April. The Ar 234 was probably engaged in the Stuttgart region of southern Germany while somewhere in the vicinity of the bombers. It was chased by a 356th Flight and finally hit by Lt. Oliver, after which the Arado spun all the way to the ground.

EPILOGUE

The last known jet action by the Army Air Force in World War II took place on 4 May 1945. The 388th Squadron, 365th Group, 9th AF, on its last mission, found 3 Me 262s in the vicinity of Prague's Ruzyně A/D but were unable to do more than damage one. They then strafed the airdrome, destroying one Me 262 on the ground and damaging two others.

The 8th Air Force had ceased operations by the 1st of May having met and defeated the Luftwaffe in the day skies over Europe and having met and mastered the challenge of the German jets—until it was the silver Fortresses, Liberators, Mustangs and Thunderbolts that controlled the high sky over all of Europe.

In its ten month struggle with the jets, the 8th Air Force had run up these totals: Fighters--1233 encounters, 705 combats, claims of 146-11-150 in the air and 121-0-65 on the ground. Bombers--740 encounters, 392 combats, and claims of 59-46-57. The traceable cost was 10 fighters and 52 bombers.

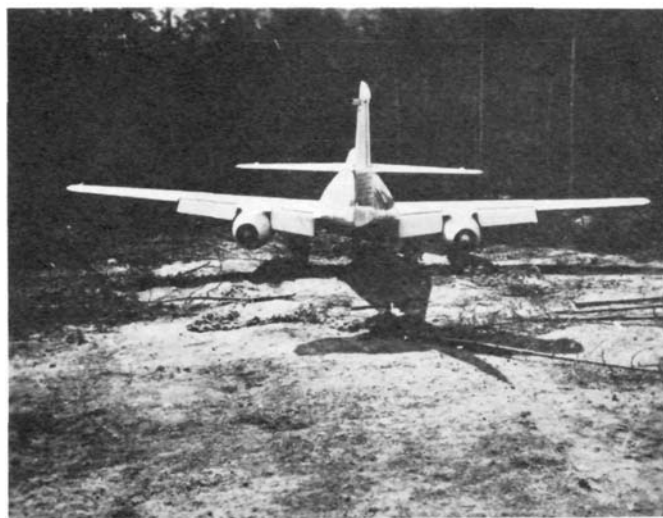
The 8th had led the way in vanquishing the late threat of the German jets, but the 9th Air Force, the 15th Air Force and the Royal Air Force had also done their part. It is regrettable the totals of their accomplishments cannot also be given here.

A CAPTURED ME 262 (1)

About 1345 hours on 30 March 1945, a Messerschmitt Me 262 A-1, Werke Number 111 711, with wheels down circled Rhein-Main airdrome. Occupying American troops on the field tried anxiously to identify it. The pilot carefully picked the only available field strip among the bomb craters, brought his plane into a perfect landing, and stepped out of the cockpit. Thus the first flyable Me 262 came into American hands along with the invaluable knowledge of its pilot.

He was Hans Fay and had been born in Speyer-Rhein in 1914. In 1932, after receiving the equivalent of a high school education, he entered on three years of aircraft construction and engineering training in Mannheim and Weimar. Fay received his basic (A/B) flying training in the Luftwaffe in Darmstadt and Mannheim in 1936, then he entered tactical training as a fighter pilot at Mannheim/Sandhofen in 1938. On 23 July 1939 he was inducted into the Luftwaffe to participate in a flight teachers' course at Hersongenaue, after which he was assigned to operational fighter units. In May 1940 he was transferred as test pilot to the Luftwaffe Erprobungsstelle (GAF Experimental Station) at Rechlin, where he tested the performance of captured enemy planes.

(D This section, and the following sections on the Me 262, are taken from a report made at the time by AAF Intelligence officers.



Four views of the Me 262A-1, Werke Nr. 111 711, flown

Allied side on 30 March 1945. (Photos-Wright Fld)

Daring the winter of 1940-41 Fay was detached from Rechlin to Gardemoen, Norway, to make experiments with ski undercarriages on the Bf 109, Ju 87 and Fieseler-Storch.

In August 1941 he was discharged from the Luftwaffe, given professional deferment, and assigned from Rechlin as Bf 109 acceptance pilot to the Erla Aircraft plants at Leipzig. From February 1942 to July 1943 he worked in the repair shops of Erla in Antwerp. There he also flew defensive missions, as test pilots at that time were called upon to do, and he received the E.K.II (Iron Cross 2nd Class) for shooting down a Spitfire. In August 1943 he returned to Erla-Leipzig again as an acceptance pilot for the Bf 109.

Fay was recalled into the Luftwaffe proper in September 1944 and was returned to Erla on furlough status. In December he was transferred by the German Air Ministry to Messerschmitt in Augsburg as acceptance pilot of the Me 262. On 1 January 1945 he started this new assignment with the Messerschmitt branch at Neuburg-Donau and Memmingen. He later continued his work in Neuburg from which he flew his aircraft to Rhein-Main.

He had waited a long time for an opportunity which came as the result of two factors. First, the home town of his parents, near LachenSpeyerdorf, was at last in American hands. (He had informed his family of his intentions during Christmas 1945, and they in turn had told U.S. authorities to be on the lookout.) Second, 22 new jet planes which were in danger of capture at

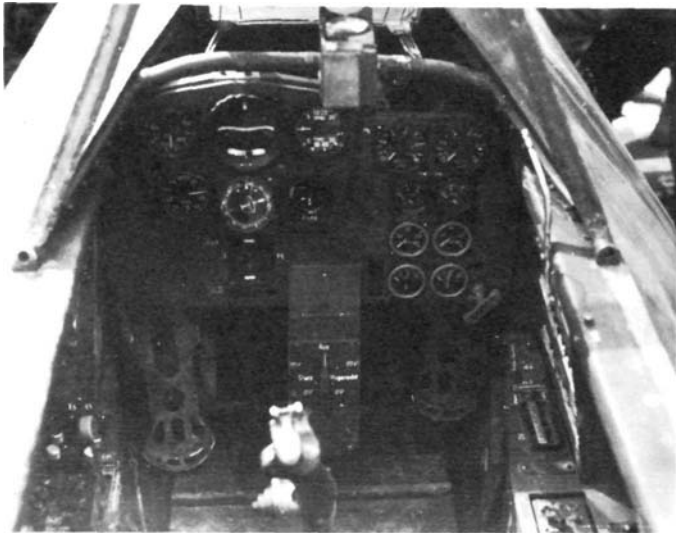
Schwabisch-Hall were ordered to be flown to Neuburg. With his family safe, Pay saw his chance. He would fly his plane from Schwabisch-Hall to Lachen-Speyerdorf, turn it over to the Americans and join his parents.

His plane was the fourth to take off on 30 March, and on gaining altitude he attempted to retract his landinggear. It was faulty and failed to lock securely into place. For a moment he hesitated then decided to go ahead with his plan. He flew on with landing wheels down at about 350 feet. His efforts to retract the landing gear took him off course. This, plus being slowed down considerably by the lowered landing gear, made him doubt his ability to reach Lachen-Speyerdorf. He quickly chose Rhein-Main as a substitute field, circled, picked a runway among the craters and landed with a run of only 400/600 yards.

DESCRIPTION OF THE Me 262A-1

German pilots Fay knew called the Me 262 "Silber" (Silver). Although he only flew the A-1 he knew of one other type of Me 262. This was a two-seater with plexiglass nose and no armament which he saw at Lechfield in January 1945.

Fay stated the merits of the Me 262 lay in its high speed and heavy armament, the latter consisting of four MK 108 30 mm cannon adjusted for the fire to converge at 500 yards. Its demerits lay in its lack of



Cockpit arrangement of Me 262A-1, Werke Nr. 111 711.
(Photo—Prank J. McIntosh)

maneuverability, its relatively short range, and in the extreme vulnerability of the jet units which tended to catch fire very readily if hit in aerial combat.

The jet power plants were Jumo units designated as TL 109.004 B-1. The gun sight was the old fashioned Revi 16B reflector-type which could be turned out of the pilot's field of vision. A fair number of newer Me 262s were equipped with a gyroscopic sight.

Armor protection was a 16 mm bulkhead made in four sections at the forward end of the cockpit. Behind the pilot there was a 16 mm head and shoulder armor plate. The canopy consisted of two parts which could be jettisoned in one operation by pulling the red handle on the right hand side of the cockpit.

A "Preliminary Flight Permission" ("Vorläufige Fluggenchmigung) brought along by Fay stated that the maximum weight for starting was 15,620 lbs. This included the basic weight of the aircraft, 8,514 lbs., plus 7106 lbs. allowance for fuel and bombs. If the weight when landing was more than 12,540 lbs. special caution had to be taken.

Aircraft 111 711 had two external bomb racks. The maximum bomb load was stated by the pilot to be either 2 x 250 kg (550 lb) or 1 x 500 kg (1100 lb) bomb. Lettering on the underside of the fuselage indicated the maximum carrying capacity at 500 kg.

There were two main fuel tanks, one forward and one behind the cockpit, each with a capacity of 238 U.S. gallons. Beneath the seat of the pilot was a reserve tank of 53 U.S. gallons capacity. Total fuel capacity was therefore just over 529 U.S. gallons. Fay knew of three varieties of fuel which could be used: a) the standard fuel, used by him on all flights, a brown coal fuel oil known as J-2, b) diesel oil, and c) aviation gasoline. According to operating instructions, standard aviation gasoline was not considered so desirable because of its fast rate of consumption.

The length of runway required by an experienced pilot for takeoff and landing with the Me 262, with 475 U.S. gallons load and no bombs was estimated by Fay as:

	CONCRETE	GRASS STRIP
Takeoff	900-1100 yards	1100-1400 yards
Landing	900-1100 yards	700-900 yards

In acceptance flights speed was the one requirement which was most strongly stressed. Test pilots and inspectors had orders to refuse delivery unless the aircraft met the following specifications:

- a. Actual speed in straight and level flight at

full throttle, 515 mph. Instructions were not to fly at this speed for more than 10-15 minutes, though Fay believed that speed could be maintained for 20 minutes.

- b. Speed in a shallow dive, at about 30 degrees from the horizontal, 589 mph. Speeds of from 620-650 mph were spoken of as the absolute maximum for diving.

All planes tested by Fay met the speed requirement. He had heard of others which did not, but believes that after inspection and adjustments most aircraft finally met the requirements. Two aircraft turned down by Fay were so judged due to small structural defects on the plane as delivered or as the result of a slight bending of a wing of no more than 1 degree. No more than 10% of all aircraft tested were to be turned down and put aside for school machines.

Takeoff speed with full fuel load but without bombs, was about 111-124 mph. Cruising speed was 465 mph. In landing, the approach speed was 155 mph. The stalling speed with full fuel load was 112-125 mph.

Flight duration of the Me 262 varied from 45 to 90 minutes. The maximum time of flight in low altitudes was 45 to 50 minutes; in high altitudes it ranged from 60 to 90 minutes. Along with great efficiency at higher altitudes, the efficiency also varied with weather, namely barometric pressure and temperature. The foreman in charge of jet propulsion units at Neuburg obtained daily data from the meteorological office on barometric pressure and temperature. Based on this information he made adjustments on the jet propulsion units to assure proper fuel pressure in order to obtain maximum efficiency in the consumption of fuel. If one of the jet units cut out during flight the demand on the second unit was so great that it would fail shortly afterwards.

Fay stated that the structural workmanship on the Me 262 was not as good as that on the Bf 109. When testing the Me 262, it was not infrequent for parts to be stripped off in steep, fast dives, and he had himself lost cockpit covers, bomb racks, and the needle-valve of the tail pipe during dives. In fact, because of these uncertainties, pilots rarely did a roll or similar maneuver during acceptance flights.

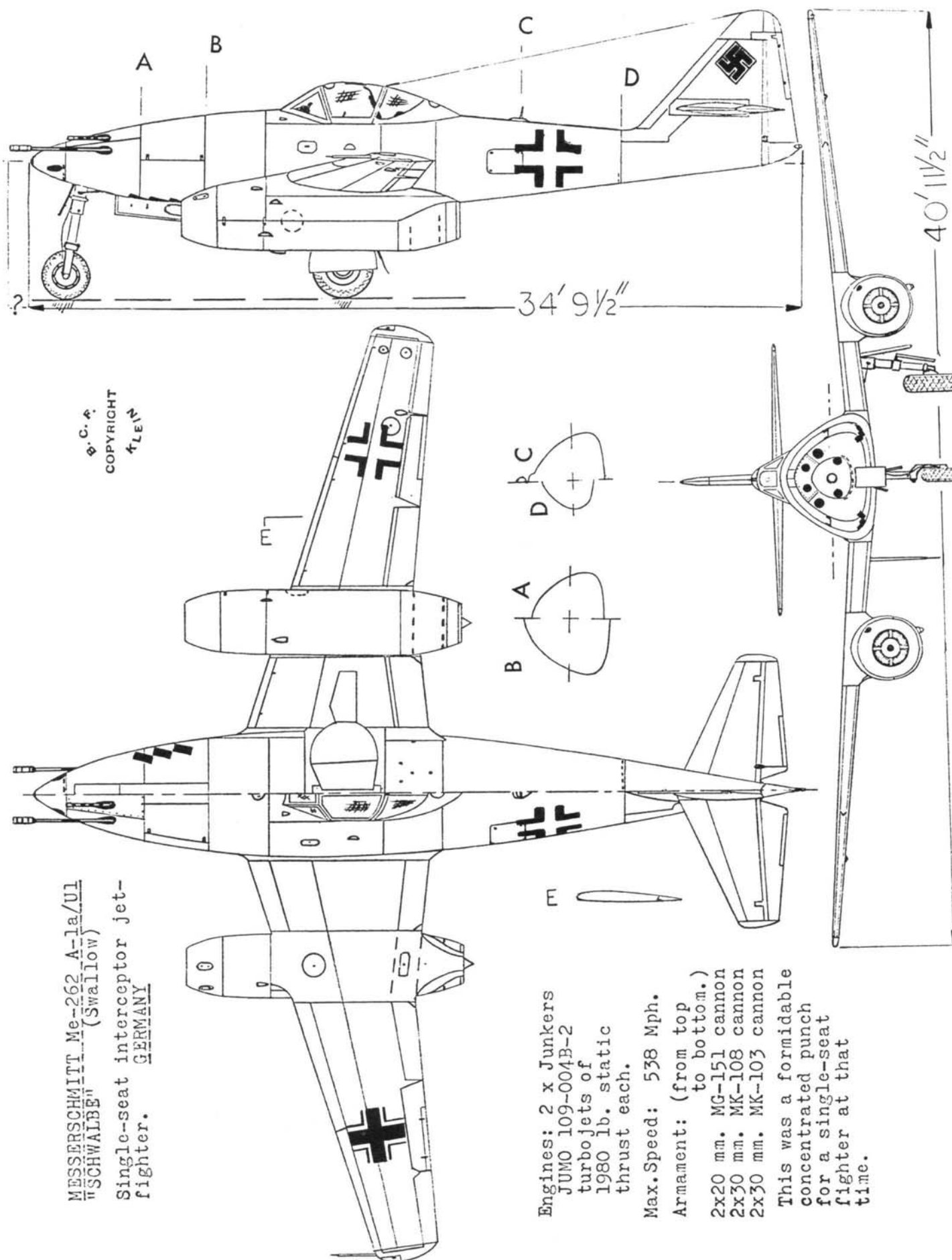
OPERATING THE Me 262

Starting procedure began by switching on both engines followed by: Pull starter switch up and hold for two seconds. Press button to put RPM indicator in low-speed range. When power unit reaches 700 RPM, press the buttons on right side of throttles and hold until a deep throbbing noise is heard. When the units begin filling the RPM will increase rapidly to between 1800 and 2000, at which time release starter switch, open operating fuel switch and turn on fuel pump. Gradually open the throttles and when a speed of 3000 RPM is reached, release the low speed tachometer button and the starting fuel button. The unit is now functioning on J-2 fuel and the aircraft is ready to be flown.

If power units fail to start, the throttle button should be released and the tail pipe should be wiped clean of any injected fuel before repeating the process. Otherwise the turbine may catch fire or heavy smoke might develop. In such a case, or whenever there is fire or smoke, one should at once release the starter switch. Due to this fire hazard a fire extinguisher should always be handy.

It is essential to have a battery cart accessible not only for the starting procedure but also after landing. The improper shutting down of the jet units, after landing, causes the turbine to smoke inwardly or even catch fire, and it is necessary to restart the jet units. However, they can run indefinitely on the ground without heating up excessively.

For Cockpit Check, increase RPM to 7000. Between 7000 and 8400 RPM, the needle valve in the tail pipe



should move rearward to the fully extended position. This is visible from the cockpit and indicates that maximum thrust is being developed.

Check the gas temperature gauge to see that it does not exceed 740° C. Check fuel pump pressure gauges and see that pressure is between 50 and 80 kg/cm. Switch front fuel tank to port engine and rear fuel tank to starboard engine.

In taxiing, caution must be exercised because the rudder is ineffective and steering by thrust is difficult as thrust builds up slowly.

For take off, set trim at "0" or "1" on the trim indicator, with 20 flaps. Hold aircraft with main wheel brakes, opening throttles slowly until 7000 RPM is indicated on both power units. Release brakes and open throttles fully. After a distance of approximately 200 meters has been reached, pull gently back on the stick and raise the nose wheel.

In flight, check the fuel pump pressure and see that it is equal in both jet units. Check lateral trim. Ailerons should not be out more than 10 mm when stick is in neutral position. In climbing or turning, slots should open when speed drops to 279 mph.

For landing, lower landing gear at speed between 220-250 mph. It may be expected that the nose will rise sharply as the nose wheel is lowered but once the nose wheel is dropped to landing position, the aircraft will resume a normal attitude. After lowering landing gear, retrim the aircraft carefully. Make the landing approach at a speed of 155 mph and stall the aircraft out at a speed between 112-125 mph.

To stop engines, close throttles completely and press ignition buttons. Switch off fuel pumps and close fuel lines. In the event that power units should begin to burn, pull starter switches, re-ignite power plant and repeat the shutting down process.

Fay was told that the normal span of life of the jet unit was 25 hours of flight. He believed that actually it was more likely to reach only 15 hours. After that the tail pipe (Schubduese) as well as possibly the combustion chamber (Brennkammer) might be damaged through overheating and will start buckling and blistering. The metal of the needle valve might even develop cracks, and the blades of the turbine wheel might bend. These parts have to be watched carefully.

He suggested that after each flight the following checks should be made:

- a. From the rear of the jet unit: Whether the turbine wheel blades are bent, whether the tail pipe metal has buckled and whether the needle valve of the tail has developed cracks. If so, it must be repaired or replaced. The tail pipe may be removed and any buckles in the metal straightened out, after which it may be used again.
- b. From the front of the jet unit: Whether the blades of the turbo-compressor have been dented by small stones forced into it by the suction of the jet unit. The turbo-compressor must be replaced if such dents exceed 3 mm.

FLYING CHARACTERISTICS

Fay stated that the Me 262 had good stall characteristics. The 262 had very good aileron control at all altitudes and at very high speeds, and it would do a good slow roll. He never put one into a spin but had stalled them intentionally. After stalling, it fell forward with no bad spin characteristics. As his work as test pilot never took him above 13,000 feet, he did no acrobatics other than slow rolls.

The Me 262 would turn much better at high than at low speeds, and due to its clean design, would keep its speed in tight turns much longer than the conventional type aircraft.

Spoilers (automatic slots) were fitted along the whole length of the leading edge of the wing. These

came out automatically at about 186 mph when the plane was in a glide angle and about 279 mph when the plane was climbing.

There was no **flutter** while diving, and Fay conjectured the reason for this to be the high position of the horizontal stabilizer in relation to the airflow around the wings. About one third of the aircraft tested by Fay had a light tendency to skid during their first flights. This was easily eliminated by adjusting the trim tab on the rudder.

From 7000 to 8700 RPM, which was full power, the throttle could be increased quickly. Below 7000 RPM, the throttle had to be increased smoothly and slowly. A big error in the handling of the Me 262 was to increase the throttle too rapidly. Messerschmitt was trying to develop a regulator which would automatically guarantee a smooth injection of fuel.

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Although this article has told, much of the story, there are still blank spots. It is hoped that anyone who has information pertaining to one or more of the missing facts will contact the authors through the JOURNAL so that such material can be made a part of a supplementary record.

MILESTONE REACHED

That's right, a milestone! The A.A.H.S. is in its eighth year of growth and we've reached a milestone of which we can all be proud. Turn to page 226, read about it, and then, let's all get together and work on the next milestone! To make us better than the best. How? It's all there, upper right of page 226.