GAF FIGHTER OPERATIONS

Enemy Pilots Describe Methods and Tactics Used in Interception, Patrols, and Sweeps

Change	Percentage
- 4	- 50%
- 4	50%
+ 16	+130%
4	New Def
8	New Def
- 14	- 50%
- 4	- 100%
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- 6	- 33%
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8	New Def.
+12	+ 300%
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-10	- 29%
-10	- 49%
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A WEALTH of intelligence on enemy fighter tactics and procedures has been acquired through interrogation of a number of Luftwaffe fighter pilots captured after being shot down on operations over France, Belgium, and Holland during December and January. Correlation and analysis of the information obtained, as well as the actual interrogations, have been carried out by USAAF interrogators and officers of ADI(K), and result in a detailed report covering many phases of GAF fighter operations. Eighth and Ninth Air Force pilots also assisted in the interrogations. report provides a useful supplement to those on "Company Front" and Attack Group tactics published in SUMMARY No. 61 (page 5) and No. 66 (page 5). In addition, it contains much new intelligence on other types of operations by GAF fighters based in Western Germany.

Prisoners who provided the information for this report comprise pilots from seven different Jagdgeschwader, and include a Geschwader Kommodore, two Gruppenkommandeure, and three Staffelkapitäne. The individuality of fighter pilots generally and the varied methods peculiar to different units make it difficult to set down any standard tactical procedures. To convey a balanced picture, however, different methods and all reasonable viewpoints of the prisoners, many of them very well informed, have been taken into account.

First part of this article will deal with procedures and tactics in operations against Eighth Air Force bombers and escort whenever units based in Western Germany are called on to participate in this typeof defense. Later sections of the article will treat certain other fighter operations, and it is contemplated that further portions of the ADI (K) report will be published in a later issue of the Summary.

On the occasions when German fighter units based in Western Germany have been put up to attack Eighth Air Force bombers heading for tactical areas, Western Germany targets, or penetrating towards Central Germany, attempts at interception by these units have generally met with little or no success. In contrast to the units trained in mass attack formations and "Company Front" procedure, fighters located further west usually operate as individual Gruppen and employ varied tactics.

Again, whereas on interception operations in Central Germany the fighters have strict orders to attack the bombers at all costs, Gruppen based in the West are briefed not to attack bombers if the Allied fighter escort is so positioned as to threaten

to inflict heavy losses. A further standing order covering such missions in the West prohibits engagement with any Allied free-lance fighter groups encountered en route to the bombers.

Briefing: Special features of briefing include a detailed description of the course and height of Allied bomber formations and particulars of the accompanying Allied fighter cover. Usually the formation leader indicates how he plans to deliver the attack and how the Gruppe should re-form after the attack, this being necessary because most of these pilots have little or no experience in operations against heavy bombers.

Formation: Type of formation flown is similar to that employed on fighter sweeps as described later in this report. When Allied fighter opposition is expected, some of the aircraft of the Gruppe, varying in number from an element of four to a Staffel of eight to 10, fly as top cover.

Control and Approach: Immediately after assembly over their base, the GAF fighters climb to reach the reported altitude of the bombers. Since only a short warning of approach is received, a high rate of climb is required, with resultant high fuel consumption, so that a German fighter formation operating in the West on this type of mission can only remain airborne for about one and a half to two hours with drop tanks, as against the average period of two and a half hours for fighter units in Central Germany. This time limit applies equally to the FW-190A-8 and D-9 and the Me-109G.

Should Allied fighter formations be sighted before contact is made with the bombers, German fighters usually detour, using cloud cover if available.

Tactics: On sighting the bombers the German formation leader will ascertain whether fighter escort is present; if so, he will fly parallel with the bomber formation, climbing steadily to gain position to attack the escort from high rear.

In cases where the German formation makes visual contact with the bombers when level with or below them, it may be spotted too soon and be forced to join combat prematurely, but if the German fighters arrive on the scene with the advantage of greater altitude it is possible to jump the fighter escort as desired from high rear.

Forcing US fighters to jettison their drop tanks when attacked is in itself considered an achievement, since this will restrict their range. Some experienced GAF pilots based in the West have long advocated this method of crippling Eighth Air Force fighter

escort and have actually practiced it on occasion on their own initiative, but higher authority in the Luftwaffe never sanctioned any systematic use of the fighter force for this purpose, insisting instead that the primary object of all interception missions must be to attack the bombers.

One prisoner, a Geschwader Kommodore, believed that had this form of strategy been introduced about a year ago, it might have been the means of seriously hampering heavy bomber operations. He considered that the quality and strength of the German fighter force in the West at the time he was shot down on 1 January, 1945, was too weak to perform the double task of protecting ground troops and carrying out systematic attacks on Allied fighter escorts.

In the absence of fighter escort, or if it is possible to by-pass the escort, the Gruppe will attack the bombers from high rear either as a unit or in successive waves of four. Experienced pilots usually open fire at 400 yards on the tail gunner and then continue firing at the wing roots and inboard engines, but gunnery tactics of new pilots vary considerably due to their lack of training and their limited operational experience.

Exit from the bomber formation is made by climbing, diving or side-slipping. There is no set method of reassembly, the main consideration being to regain position for a further attack; this may be made from any quarter or altitude by any reassembled element or by individual aircraft.

Some formation leaders still favour the head-on attack, opening fire from 800 to 600 yards, after which the German fighters either execute a "split S" and go down in front of the bombers, or climb

and renew the attack from the tail.

On most of the operations in which prisoners had taken part, escort interfered with the German attempts at interception at one stage or another, usually with the result that the German formation was broken up and its elements so scattered that a concerted attack was impossible. When the Allied fighters engaged the German fighters during or after their attack on the bombers, it was difficult for the German pilots to regain formation, and individual small elements did their best to ward off attack and to escape.

Gunnery Against Heavy Bombers: A prisoner described a method of firing at US bombers from the rear which he claimed to be both simple and effective. To carry out this attack the GAF pilot flies on a course at an angle of 10° to that of the

bomber, so that his guns are aimed at its near wing tip. At 430 yards the German pilot fires a short burst to check alignment and, keeping the same angle of approach, begins at 300 yards to fire for effect. His fire should then strike the bomber between the two near engines in the case of a fourengine bomber, and between the near engine and the wing root in the case of a twin-engine aircraft. This prisoner claimed to have shot down two B-26s during four attacks made on this principle.

Ineffectiveness of Attacks: Three experienced and intelligent prisoners-two Gruppenkommandeure and one Staffelkapitän-when questioned as to the possible cause of the poor results obtained over Western Germany in attacks on Eighth Air Force bombers, advanced two reasons, apart from the overriding admission that reaction is weak on account of the quantative and qualitative inferiority of the Lutwaffe. One was that the main function of GAF fighters based in the West was to counteract Allied fighter-bomber operations firstly over the front line zone and secondly over Germany, and attacks on heavy bombers were only laid on as a stop-gap when weather conditions precluded Allied fighter-bomber operations.

The other reason given was the admitted inexperience of the present day German fighter pilot stationed on the Western front in operations at high

altitudes and against heavy bombers.

Ramming: Many stories of somewhat questionable veracity have been told by prisoners of orders or exhortations to "Defense of the Reich" fighter pilots to ram Allied bombers if victories cannot be secured in the more conventional manner. These stories have usually been linked with the FW-190 Attack Group units.

According to some of the prisoners dealt with in this report, instructions on how to ram advise pilots to gain position a few yards behind and slightly above the tail unit of the bomber, jettison the cockpit cover, unstrap the safety belt and push the control column hard forward. The quick nosing down of the fighter aircraft will, it was claimed, catapult its pilot into space and almost simultaneously the aircraft will ram and break the tail of the bomber.

No German pilot has ever claimed to have accomplished the feat of ramming a bomber, and it is noteworthy that pilots in FW-190 "Defense of the Reich" Attack Groups, such as II/JG 4 and IV/ JG 3, formerly based in Central Germany, know of no positive instances of intentional ramming.

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Tactics on Front Line Fighter Sweeps

PRINCIPAL type of operation flown is the fighter sweep, known as "Freie Jagd," which involves patrolling over a given area with a view to contacting and attacking Allied fighter-bombers, fighters, and on occasion, artillery observation aircraft.

Average size of the formation carrying out a sweep is 20 aircraft, and in most instances patrols are flown by Gruppen individually. The size of the formation may be larger, dependent upon the number of serviceable aircraft available in the Gruppe and sometimes two Gruppen may be combined to provide a patrol formation if each Gruppe individually is too small to operate alone. Sweeps are flown daily, weather conditions permitting, where called for by the requirements of front line ground action and the expected incidence of Allied aerial activity.

The area selected is usually over or near the front line zone. Its size is defined by the use of geographical features, as for example "the area around Aachen," and it is also always described by recourse to the GAF Fighter Grid. The area varies in size, depending upon such factors as the number of Gruppen available, the ground operations in progress and the scale of Allied close-support effort anticipated.

Orders for the sweep usually come from Division and indicate what proportion of the serviceable aircraft available are to be put up and the time at which they are to enter the designated area. The normal duration of flight over the patrol area is 20-30 minutes, but the formation leader can terminate the sweep earlier at his own discretion. Aircraft of the formation return to their own base unless aerial combat or other eventuality forces them to land elsewhere owing to fuel shortage.

Formations on the way to the patrol area are expected to detour when necessary to avoid contact with Allied fighters, but engagement with the latter is often inevitable.

During the December offensive it was intended that uninterrupted patrol of the areas should be flown on the relay principle, one formation being relieved by another over the patrol area, but due to interference by Allied fighters with German formations en route to the patrol area, this system never worked satisfactorily. During the offensive pilots were expected to fly two sorties a day—one in the morning and one in the afternoon—provided always that sufficient serviceable aircraft were available for the second sortie.

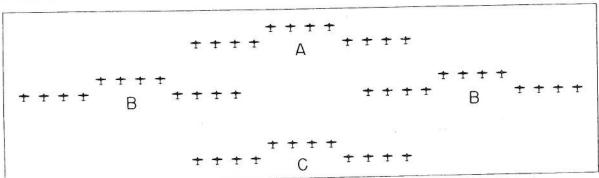
Formations: The basic element is the Schwarm (element of four aircraft) which is composed of two Rotten (elements of two), each comprising a lead man and his wing man. The leader of each Schwarm is usually an experienced pilot well acquainted with the flying methods of the formation leader.

The Schwarm leader usually flies on the flank of the Schwarm, with his wing man alongside, as indicated in Summary No. 61 (page 6). Of late, a new type of Schwarm formation has been introduced by certain units with the object of assisting pilots to retain position in tight turns. Under this procedure the Schwarm leader and the Rotte leader fly opposite each other in the middle of the four, with their wing men on each end.

It is claimed that by flying in this formation there is less tendency for the Rotte leader and his number two to break away and lose position in a turn since both leaders are better able to coordinate when flying next to each other. The average distance between aircraft in the Schwarm is 50 to 100 yards.

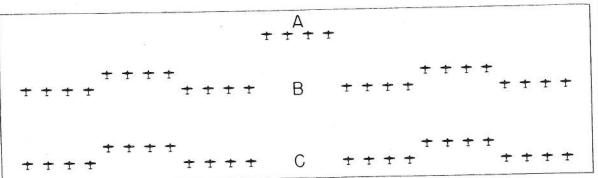
As stated, the number of aircraft in the patrol formation varies according to the available strength of the Gruppe. The CO of the Gruppe is allowed much latitude in establishing the nature of the formation to be flown, but the basic element in all types of formations remains the Schwarm.

In cases where the formation is composed of



Patrol Formation flown by GAF fighter Gruppe on front-area sweeps. Lead Staffel (A) is followed by two Staffeln about 500 feet higher (B). Top cover Staffel (C) flies behind and about 3,000 feet above. Each Schwarm is

usually stacked up from front to rear in Vic formation. Added protection is sometimes provided by a rear-guard composed of one Schwarm, and occasionally a top warning Rotte flies about 3,000 feet to the rear and level.



Leader's Schwarm, (A) in this diagram, sometimes flies out in front of the Gruppe, flanked by two of his Staffeln (B) flying at the same altitude. In this formation when two full Staffeln are available to be used as top

cover (C) they fly abreast about 3,000 feet above the others. These diagrams are not drawn to scale and do not indicate altitudes, but merely indicate general relative positions.

about 20 aircraft the Schwärme (elements of four) fly in a loose "Vic," the successive Schwärme being stepped up from front to rear by vertical intervals of from 50 to 100 yards. Distance between Schwärme

is 200 to 500 yards.

Under conditions of cloud base at several thousand feet above the formation or in the absence of cloud, a top cover of one Schwarm, flying at from 1,500 to 3,000 feet above and about the same distance to the rear, is sometimes provided. Additional protection may be provided by a Rotte (two aircraft) flying on a level with and about 3,000 feet behind the main formation to give warning of any threat from the rear.

In some units, the aircraft of the Lead Schwarm, which includes the formation leader, will fly in a closer formation than that of the other Schwärme in order that pilots in the formation may identify

the Lead Schwarm more readily.

If the patrol formation is composed of more than 24 aircraft, the aircraft usually fly in Staffeln, each Staffel being sub-divided into Schwärme flying in "Vic" formation stacked up front to rear. Staffeln in turn are stacked up from front to rear at vertical distances of 500 feet and one Staffel, or on occasion two Staffeln, provides top cover by flying about 3,000 feet above and the same distance behind the remaining Staffeln.

In cases where two Staffeln act as top cover escort, the Kommandeur of the Gruppe may decide to lead the formation with his Schwarm instead of flying in the lead Schwarm of the lead Staffel (see cut).

A pilot of I/JG 27 shot down on 1 March gave details of a new type of fighter sweep formation flown by his Gruppe during operations in February. This Gruppe only had three Staffeln instead of the normal four.

A Stabsschwarm (element of four) flew in the lead, flanked by two Staffeln, one to port and one to These Staffeln, each of which comprised two Schwärme, or alternatively two Schwärme and a Rotte (element of two) flying in line abreast, Schwärme usually fly in Vics and not in line abreast. flew at the same altitude, and right in line with the

About 80 yards behind and some 150 yards above, the third Staffel flew as top cover in line abreast formation. This top cover Staffel did not "ess" and was required to maintain position carefully so

that it was at all times visible to the formation leader and thus recognizable as friendly.

The distances kept between elements were 60-80 yards between aircraft of a Rotte, about 100 yards between Rotten and slightly more between Schwärme. The advantage claimed for this type of formation is that the formation leader can see all his aircraft at any stage in the flight and therefore no section of the formation can be attacked unknown to the remainder. Turning when flying in this type of formation is difficult and before each alteration in course the leader announces the change-as for example "Caruso 240" (change course to 240°).

The type of formation built up on Staffeln varies in the different units consistent with the dictates of cohesion, maneuverability, and protection against

surprise attack.

Large patrol formations consisting of over 40 aircraft supplied by two or more different Gruppen are very seldom employed on the Western front, and then only during large-scale ground operations when considerable Allied fighter opposition is When two Gruppen operate jointly, anticipated. it is usual for one Gruppe to fly at a distance of from 5,000 to 10,000 feet to the side of the other Gruppe, distance being governed by visibility, since both must maintain visual contact. Purpose of this procedure is to assist in spotting Allied aircraft, on the theory that Allied pilots will observe only one or other of the GAF Gruppen, thereby enabling the Gruppe not sighted to be warned over R/T to get into position to attack. Some formation leaders do not subscribe to this theory, and merely fly in this way so that one of the Gruppen may go to the aid of the other when an Allied fighter attack is imminent. In some units one Gruppe flies almost directly escort.

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directly above the other as a form of protective escort.

Methods of Approach: Altitude of approach varies. Some units after assembly over their base airfield may climb to the altitude at which it is desired to enter the patrol zone; others may fly at low altitude and begin to climb when nearing the area. If the unit is based far from the scene of operations an intermediate landing may be made for refuelling.

In deciding upon the height at which the sweep is to be flown, the factors of cloud altitude and density, the height at which Allied fighters and fighterbombers can be expected to be encountered, and the individual precepts of the formation leader all play their part.

The two principal types of Allied aircraft sought out for attack are fighter-bombers, which are expected to be encountered at below 10,000 feet, and fighters, which may be met at almost any operational altitude; the leader of the GAF formation selects an approach height consistent with ability to spot the fighter-bombers without exposing his formation to easy attack by Allied fighters.

Under conditions of good visibility and absence of cloud, the usual height of entry into the patrol zone is 12,000 to 20,000 feet; in conditions of moderate cloud density with breaks in the clouds to make it possible for Allied fighters flying above to spot the German aircraft and bounce them unexpectedly, it is customary to fly into the patrol zone above the cloud layer and go down through the clouds in search of fighter-bombers.

On the other hand, if there is a dense overcast of 9/10 to 10/10 cloud, the GAF formation will probably fly below cloud base on the assumption that it will be immune from fighter attack from above and that if caught in a disadvantageous position, resort to cloud is available as an escape.

An operational altitude of 6,000 to 12,000 feet is considered ideal for combat with fighter-bombers if cloud conditions minimize the risk of being bounced from above by Allied fighters.

The direction from which the patrol zone is entered varies—in the absence of cloud an approach from up-sun will be made and if cloud is prevalent use will be made of it to enhance the element of surprise. Strict R/T silence is observed during the approach flight, but free use of R/T is made in combat and to warn fellow pilots of impending attack.

Drop tanks are carried on most operations by both FW-190s and Me-109s, and these are jettisoned when about to join combat or at an earlier stage if they are thought liable to prove a handicap when maneuvering for position.

Combat Tactics are too varied and dependent upon numerous governing factors to permit of a comprehensive survey, consequently this section of the report is confined to an analysis of some of

the accepted methods adopted under given circumstances.

The size of the Allied fighter formation has no direct bearing on the decision to attack, since German fighter sweep formations are considered large enough to inflict some damage on the average Allied fighter formation provided conditions are favorable. If, however, the German formation is placed in unfavorable circumstances it will not attack, but all efforts will be directed to defensive action or, if possible, escape.

In encounters with Allied fighters, combat is preferred at an altitude not exceeding 20,000 feet, a height of about 10,000 feet being considered the most advantageous.

In discussing combat tactics on fighter sweeps, differentiation has been made between offensive and defensive tactics both with and without the element of surprise; for this purpose the element of surprise is considered to exist when the formation attacked does not see the attacking aircraft until it is too late to take counter offensive action, but instead must concentrate entirely on immediate escape.

Offensive Tactics with Surprise: Some German fighter units make it a practice to approach from high rear to a position slightly below the Allied fighters and nose up to attack on the understanding that the decrease in speed permits of greater firing accuracy and also enables the fighters to make tighter turns in pursuit of the Allied aircraft surprised from the rear. Furthermore, the low angle of approach makes better concealment possible.

With this method of attack fire is opened usually at a range of 150 to 100 yards, at which distance the Allied fighter's wing span roughly fills the ring of the Revi (reflex) gun sight.

Usual reaction by Allied fighters to an attack of this type is to turn sharply, and the German fighters may then either follow them in the turn or climb to gain the altitude for a second attack. The German fighters are more liable to follow P-47 fighter-bombers in a turn than P-51 fighter-bombers; they believe that the FW-190 and Me-109 will turn better than the P-47 at heights under 15,000 feet, but no such claim is made in the case of the P-51 and all but the most experienced pilots are hesitant in attempting to out-curve the latter type (see page 15).

When the Allied fighters go into the turn care is exercised by the German pilots to avoid following them too closely and thereby exposing their aircraft to fire from the rear from another Allied fighter curving in the same direction.

In carrying out an attack on Allied fighters which are turning to port or starboard, experienced pilots will select for attack aircraft on the outside of the curve, thereby avoiding the possibility of Allied fighters getting on their tails.

Prisoners considered that Allied fighters could best counteract the methods of attack described above by turning sharply in formation either to port or to starboard as soon as attacked, thereby preventing the German pilots from getting in any further nodeflection shots and from following any but the rearmost elements. It was thought that this sharp curve should be ordered by the Allied formation leader, or better still that the pilots should be disciplined to take such evasive action automatically.

Some units avoid turning in pursuit of Allied aircraft and merely attack from high rear and climb away to gain altitude for another attack. The justification claimed for this method is that even if the Allied formation is not broken up or prevented from completing its mission, the mere fact that the number of Allied fighters shot down then exceeds the number of German aircraft lost is in itself satisfactory. An added advantage lies in the fact that the maneuver can be repeated several times.

In carrying out this type of attack German pilots may at times turn slightly at the bottom of the attack dive to shoot down stragglers, but will never allow themselves to be drawn into a curving dog-fight. As a countermeasure, prisoners recommended a tactic which they had seen employed by Allied fighters, namely to split into two distinct groups so that one group can climb to a favorable position while the other group is under attack.

Offensive Tactics Without Surprise: German fighters will seldom attempt to chase P-47 fighters or fighter-bombers, which have time to dive away, since the performance of the German fighters is not good enough to enable them to overhaul. They will not attempt to do so when over the front line zone because of the risk of Allied AA.

In circumstances in which P-47 and P-51 fighters break and climb towards the German fighters, the leader of the German formation may dispatch part of his formation to carry out a head-on attack and keep the remainder up ready to bounce stragglers or later to join in the attack with the other section of the formation.

One prisoner, who was an experienced formation leader, employed the following procedure in the circumstances outlined: if when in a position to attack from high rear his formation was spotted by the Allied fighters, the latter usually turned and climbed; his formation would then likewise turn and climb, thereby retaining the advantage and forcing the Allied formation to go into another turn and climb; this maneuver would be repeated until some Allied pilot became careless and broke formation, whereupon German fighters would dive and shoot him down.

This type of tactic was considered by some prisoners to be the best solution to a difficult problem, since when Allied fighters have forewarning of attack there is little hope of destroying many.

Defensive Tactics When Surprised: When attacked with the element of surprise, a formation leader gives the order to break to port or starboard "Alle nach links [rechts]"), but it often happens that some of the inexperienced pilots will try to evade in some other manner, to their undoing.

Having curved away, at least half of the German fighters will go into a circling fight, since they lack sufficient speed to out-climb Allied fighters, leaving the remainder to break off and either climb and resume combat or, if the situation is judged hopeless, Some formation leaders, endeavor to escape. however, so dislike a circling flight that they will try to get their formation away in a climb after breaking to port or starboard.

Once involved in a circling flight over Germany the German pilots may endeavor to gain altitude by using emergency rating, being of the opinion that as long as they are over German territory they need not watch their fuel gauges as carefully as the While circling they endeavor Allied pilots must. to move towards German territory and once they have been successful in out-climbing the Allied fighters they break and head for base.

When in a circling fight, only the very experienced GAF pilots will attempt to climb sharply and execute a rudder turn in order to get in a burst at an opponent, and this type of maneuver is unknown to most present-day German fighter pilots.

If the expedient of diving away when attacked is resorted to, the German pilots may dive westwards on the assumption that they will thereby confuse the Allied pilots, who will expect them to dive eastwards towards their own territory.

Questioned as to why some German pilots when surprised from high rear flip over and dive away, thereby becoming easy prey, the prisoner took the view that this maneuver could only be due to gross inexperience.

Defensive Tactics Without Surprise: When sighting Allied fighters flying above them, German fighters may attempt to entice their opponents down to an altitude at which the superiority in performance of the Allied fighters is much less pronounced. The most favored altitude is 10,000-15,000 feet.

One method employed in carrying out this maneuver is to simulate an attempt to escape by diving and then pull out sharply, leaving the Allied fighters with their greater diving speed to pass by with little chance of getting in an accurate burst. In such circumstances the Allied fighters sometimes pull out and turn. One prisoner remarked that though the P-47 can pull out quickly and turn well, it loses so much speed in so doing that it presents a somewhat easy target for any German fighter which can double back. No such advantage is claimed, however, over the P-51.

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after diving the P-47s should climb again and gain position for another attack rather than turn immediately in pursuit.

Other German pilots flying under 20,000 feet, and sighting Allied fighters above them in a position to attack, turn and climb towards the Allied fighters

in an endeavor to meet them head on, and thus have an equal chance of getting in a burst.

Another common type of evasive maneuver employed is to go down in a tight spiral or spin with a view to engaging the Allied fighters at a more favorable altitude or escaping at tree-top level.



The Development of Me-262 Interception Tactics

CREWS of Eighth Air Force bombers and fighters on deep penetrations have watched the tactics of the intercepting Me-262s pass through two stages of development and arrive at a third. Because the third stage appears to be the most effective and efficient use of jets as interceptors, it is probable that its form of tactics will be the one opposing our strategic operations from now on.

First Stage, beginning with our first jet sightings and lasting until February of this year, appeared to be experimental in nature, and the relatively few operational jets were being used in what might be called "capability tests." Pilots were in the process of feeling out the possibilities of their aircraft. Both heavies and escort frequently reported sighting jets, but actual attacks were rare, and seemed generally to be more accidental than planned. They may have resulted from momentary eagerness on the part of Luftwaffe pilots on training flights, although possibly some were planned combat experimentations.

Second Stage of development was rather short and consisted of more or less *bona fide* interceptions. Most of the engagements, however, were with escorting fighters, with only a few determined attacks on bomber formations. Stragglers were pounced upon when found. Combat with our fighters had the apparent purpose of causing them to drop external tanks, thus decreasing effectiveness of their escort by reducing the length of time they could remain with the bombers.

A logical follow-up on this type of assault would have consisted of attacks on the bomber boxes by conventional aircraft after the escort had been spread thin. However, on the two operations in this period in which Me-262s were aggressive in attacking escorting fighters (those of 9 February and 22 February), this follow-up did not take place (SUMMARY No. 66, page 4; No. 69, page 5).

Third Stage in Me-262 interception tactics is assumed to have begun on 3 March (SUMMARY No. 70, page 4). Reaction by Me-262s on that date to the Brunswick-Magdeburg penetration is estimated from evaluated sighting and encounter reports to have consisted of possibly 30 to 40 sorties, a reaction

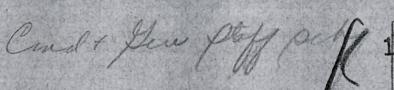
approximately equal to that taking place on 22 February. Tactics employed on the latter date were, however, entirely different. The jets deliberately avoided the fighters and pressed attacks on the heavies only when the escort was not in the immediate vicinity, i.e., practically on top of the bomber boxes, or after it had been drawn away by a chase after other jets.

The relative success obtained by the GAF jets on 3 March (four bombers downed against a claim of two Me-262s destroyed by the bomber gunners and none by the fighters) should be a fair indication that this general method of attack will be followed henceforth. The example makes quite clear that a comparatively small number of jets, in contrast to the large numbers of conventional fighters reacting in the past, can be rather annoying when used intelligently.

Tactics on 3 March: Analysis of the Me-262 tactics on this date reveals that the jets preferred to attack from either 6 or 12 o'clock. In most cases, attacks from other directions turned out to be feints. No preference was shown regarding the level of approach, but high approaches were generally not very high and low ones not very low. The number making a particular pass varied from one to four, but when more than one attacked, an echelon (almost in trail) formation was used. Breakaways varied considerably, though they always combined a change in altitude with a change in direction. Bomb groups were bounced while strung out in bombing formation and the jet completely ignored German flak when attacking.

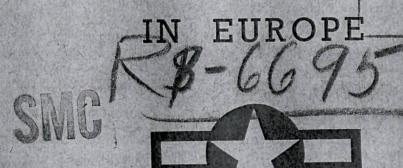
The Me-262 pilots did not seem to be particular as to which group of the bomber column they attacked, and they were not averse to climbing back for a second pass after diving away from the first one. In some instances the jets seemed to glide with power off when attacking, probably to obtain a longer firing burst by lessening the rate of closure.

Another point worth noting is that the jets seem to be less tied down by poor weather conditions than the FW-190s or Me-109s, probably because the pilots flying them are a little more experienced and have better instrument backgrounds. Recently, also, Me-262s have been interfering with some success with photo reconnaissance operations.



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