

"COMPANY FRONT" TACTICS

Prisoners from JG 4 Describe Their Method of Attacking USSTAF Bombers

A DETAILED picture of "company front" tactics by German fighters in their attacks on USAAF bombers has been secured from the interrogation of five Me-109 pilots from JG 4, who were among the lot captured after the ill-fated operation by that geschwader on 3 December (SUMMARY No. 58, page 4).

The prisoners include a 2nd Lieutenant who was a Staffelführer (roughly equivalent to leader of a squadron), three Fähnriche (officer cadets who after a certain amount of operational time would be commissioned), and an Unteroffizier (corporal). Interrogation was by USAAF officers of the PW & X Detachment, MIS, assisted by an experienced Eighth Air Force fighter pilot and other Eighth Air Force specialists.

According to the prisoners, the "company front" is the sole method of attack employed by JG 4 against heavy bombers flying in group or squadron formation. They have always made such attacks from the rear, and while their only operational experience with it was against B-17s, they had been instructed to employ the same tactics against B-24s and other four-engine bombers.

It will be recalled that these pilots and others captured on 3 December were engaged on a ground-attack mission on that date. For nine or ten weeks before moving forward for this type of operation, however, the geschwader had been engaged on operations in defense of the Reich against Eighth Air Force attacks, from Finsterwalde (5136N-1344E) and other fields in the Dresden area.

Operational Alerts: Pilots of JG 4 usually received warning of an impending operation by being given instructions to be at readiness in the following stages:

1. One hour's readiness.
2. Fifteen minutes' readiness.
3. Five minutes' readiness (*Sitzbereitschaft*), at which time the pilots enter their planes.

The prisoners understood that the first warning of probable bomber attacks came from the German radio intercept service (SUMMARY No. 55, page 5, *et ante*) while our planes were assembling over England.

Assembly: Before takeoff, pilots are briefed to assemble over a given landmark, such as an airfield, town, lake, etc., at a predetermined altitude. In the case of JG 4, the entire geschwader (three groups of Me-109s and one of FW-190s) assembled at heights varying from 3,300 to 6,600 feet over one of the fields being used by the geschwader.

When there was low overcast, but not of such

density as to prevent the formation from climbing to operational altitude through it, the geschwader assembled below the cloud base. The pilots said that dense cloud layer more than 3,300 feet in depth would keep the unit grounded, unless there were breaks through which it could climb. Full 10/10 cloud would prevent takeoff.

One of the more experienced pilots claimed he had five hours flying instruction in climbing through cloud layer during training, with formations of up to 50 aircraft. The remaining four prisoners had had no training of this type.

On operations the formations climbed through overcast in flights of four.

After assembly, which may take anything from 15 to 30 minutes, the entire formation climbs to the predetermined operational altitude of 26,000 feet or more and is there vectored onto the bombers. In the case of JG 4, the usual formation consists of from 24 to 48 FW-190 attack fighters and about 100 Me-109 escort fighters, but varies with the number of planes and pilots available.

Flying Formation: From the time the formation has reached operational altitude until the stage when the geschwader launches the attack, the following standard formation is flown:

Attack Fighters (*Sturm Gruppe*): FW-190s in three waves of 8, 10, 12, 14 or 16 aircraft, the waves being flown in trail and stacked down. In each wave the FW-190s fly in stacked-down Vic formation until the bombers are sighted, at which time the FW-190s within each wave move into a "company front" or line-abreast formation. It is in this formation that they attack (*see diagram, page 7*).

Escort Fighters (*Begleit Gruppen*): The attack fighters are escorted by three groups of 36 or 40 aircraft or less, which fly in flights of four. Two of these groups fly as close escort, the third as top cover.

The flights within each group are echeloned up-sun. The two groups providing close escort fly above and on either side of the waves of attack fighters; the top cover group flies above and slightly behind the close-escort groups (*see diagrams, pages 6, 8-9*).

Formation Leaders: The attack group together with its escort is usually led by the Geschwader Kommodore, and in his absence by a pre-appointed substitute; there may be several deputies appointed and their identity would normally be announced at briefing.

The Geschwader Kommodore or his substitute flies in the leading wave of the attack group. His position in the wave will vary from mission to

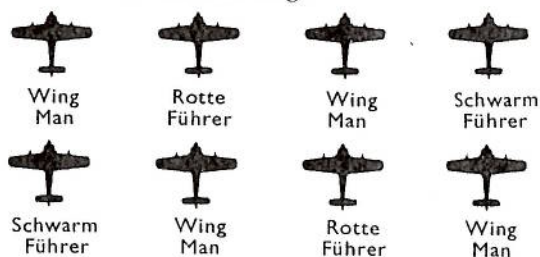
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mission. According to the prisoner, the leader flies more frequently in the fourth, fifth, eighth or ninth fighter, counting from the right as the tail gunner views the first wave. Should the leader be forced to abandon the operation, his deputy would normally assume a similar position in the formation.

The leadership SOP for each succeeding wave of attack fighters is substantially the same as that for the first wave, the only real difference being that the leader of the first wave commands the entire formation.

The basic unit of escort groups is the *Rotte* (element of two aircraft)—a leader and his wing man. Two *Rotten* in turn form a *Schwarm* (flight of four aircraft) which is the flying element on which the escort groups are based. The *Schwarm Führer* (leader) is invariably on the left or right flank of the *Schwarm*, his position depending upon "essing" during flight. The composition of the *Schwarm* may thus be shown as one or other of the following:



Should the *Schwarm Führer* be knocked out, leadership passes to the *Rotte Führer* who then becomes a "*Kette*" *Führer* (*Kette* = element of three)

and the wing man of the *Schwarm Führer* moves over to the other end of the element of three, thereby assuring that the new leader is in a flank position.

Diagram below shows plan, side and head-on views of an escort group. All the escort groups fly the same type of formation.

The leader of the escort groups usually flies in the leading *Schwarm* of the top-cover group. Should he be forced to abandon the flight, a deputy would assume leadership and likewise fly in the leading *Schwarm* of the top-cover group.

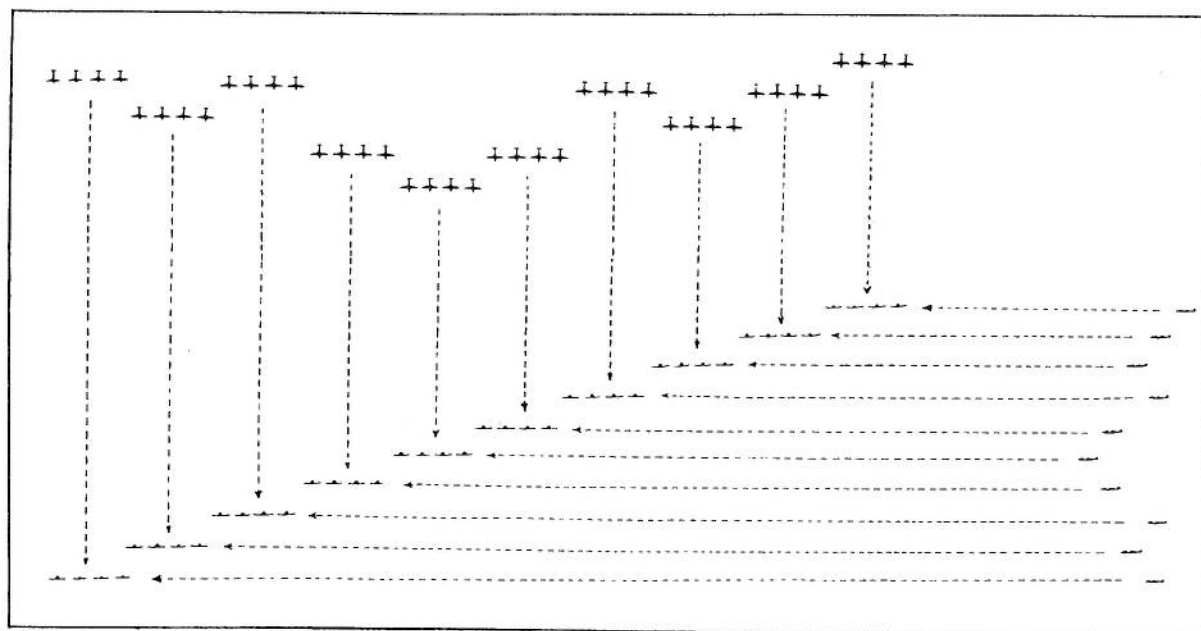
Each of the close-escort groups has a leader who flies at the head of his group, and who is subordinate in command to the top-cover leader.

Attacking Tactics: All prisoners agree that the head-on attack, though taught in theory during fighter pilot training, had been temporarily abandoned by JG 4 in favor of the "company front" method of attack from the rear. It is maintained that with head-on attacks the closing speed is too great.

All attacks made by JG 4 were carried out as described below. How far this method of operating applies to all Geschwader engaged in defense against strategic bombing missions is hard to say, but some of the present prisoners were inclined to believe that it was fairly general.

The prisoners stated that in JG 4 the FW-190s are used as attack fighters because they are more heavily armed than the Me-109s.

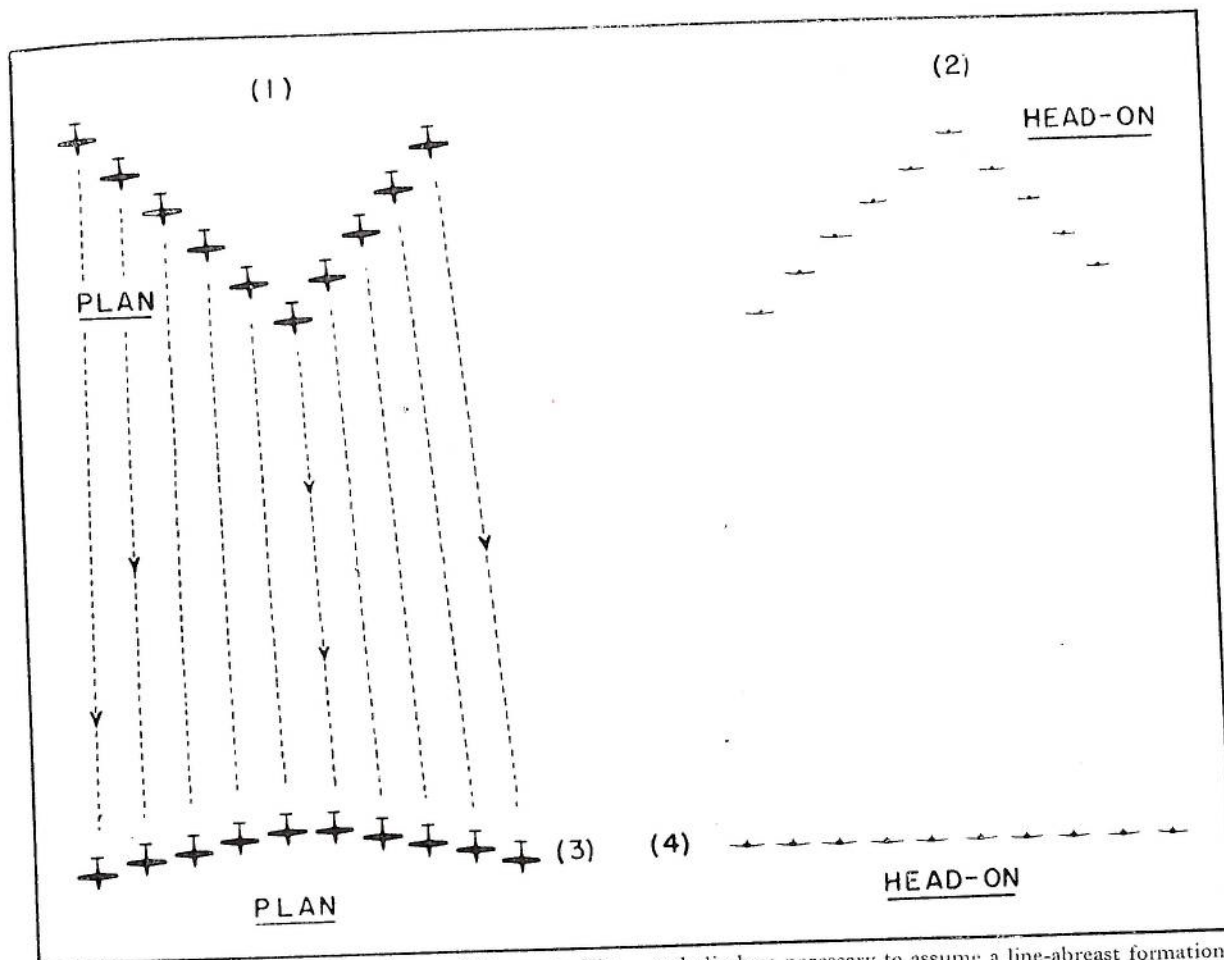
It is a standing order that the main object is to attack the bomber formation, and that the prime



Escort Group Formation: This diagram shows one group of the usual three provided to escort the attack force in the "company front" tactics. Each such escort group has about 40 aircraft and flies in the formation shown.

Close escort is provided by two of the groups, and the third flies top cover. Within each group the aircraft fly and "ess" in flights of four, but aircraft do not "ess" individually. Each group and the elements within it are echelonned up-sun.

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"Vic" and "Company Front" : 10 FW-190s in Vic and "company front" formation. While flying as a Vic the enemy aircraft are stacked down (1 and 2). As they change to the "company front" formation they fan out

function of the Me-109 cover groups is to insure that the FW-190s get into the attack without molestation from Allied fighters. Thus the Me-109s fly as a defensive force for the purpose of keeping off Allied fighters, and pilots have strict orders not to peel off or move away from the main formation to engage in dogfights with Allied fighter cover unless orders to the contrary are given by the leader of the whole formation.

It may thus occur that a cover group of Me-109s, when in the proximity of a bomber group and approaching the juncture for the moment of attack, will continue to fly on its course with the FW-190s, even though subject to lateral or rear attack by Allied fighters.

The leader of the Geschwader formation takes over supreme command after visual contact has been established with the bomber formation and gives the attack order over R/T. This order, for which the code words "*Pauke, Pauke*" are always employed, is usually given when the formation

and climb as necessary to assume a line-abreast formation. (3 and 4). There are usually three of these formations each consisting of 8, 10, 12, 14 or 16 aircraft. The three formations are stacked down relative to each other.

is at a distance of about 2,200 yards (say $1\frac{1}{4}$ miles) from the bomber formation selected for attack, and may be heard by all pilots over their radio, FuG 16z. The attacking fighters then follow the leader without any further instruction.

Except in rare instances attacks are initiated from slightly above the bombers. There are two main types of attack, one against unescorted bombers and the other against bombers with escort.

Attacks on Unescorted Bombers : In preparation for the attack, three waves of FW-190s move from Vic formation to line-abreast formation as illustrated above. The attack fighters in each wave dive towards the bombers in executing the attack. According to the prisoners, the attack fighters usually dive below the level of the particular bomber or bombers being attacked and nose up before firing. Sometimes, however, the attack fighters will pull out of their dives to attack from level. The attack as described, although from the rear of the bombers,

is a maneuver similar to the tactics commonly referred to as "The Roller Coaster" (see Special Information Intelligence Report 43-17, issued by War Department, 31 December, 1943). In most cases the fighters continue well into the middle of the bomber formation before breaking away.

In executing the tactics, the FW-190s attack first that part of the bomber formation which is nearest to them. It is left to the discretion of each fighter pilot to choose which bomber or bombers he will attack; it may well be that two or more fighters will attack the same bomber.

All three waves of attack fighters may participate in the attack, but on occasion one or two of them may be diverted or held in reserve. At other times the escort groups may also attack, in which case they will attack in flights of four following the last wave of FW-190s.

After making the attack the participating fighters will re-form approximately 3,000 feet below the bombers, and usually to the left of the line of flight. The leader, when giving the order to attack, indicates whether the formation is to reform to the right or to the left of the bomber stream by adding to his command the words "*Abgang links (rechts)*." His order would thus be, "*Pauke, Pauke, Abgang links (rechts)*," meaning "Attack and reform to the left (right)." This method of indicating the direction of the re-assembly point is also adopted for attacks on escorted bombers.

A second and sometimes a third attack is made, each attack being carried out in a similar manner. In this connection, pilots have standing orders to carry out second and subsequent attacks with the formation, irrespective of whether their ammunition has been expended or their guns have jammed, and these instructions apply equally to operations when Allied fighter cover is present.

Pilots endeavor to direct their fire at a point between either the left or right inboard engine (No. 2 or No. 3) and the fuselage, as these points are considered to be most vulnerable. The prisoners were informed that this would damage the hydraulic gear.

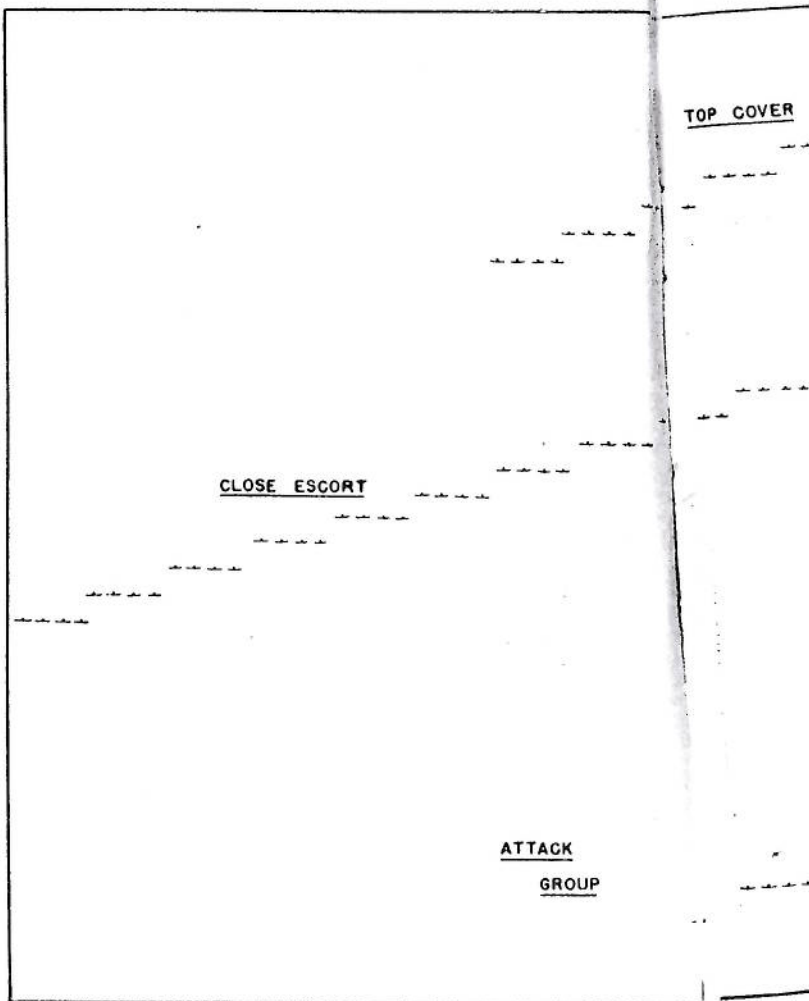
Attacks on Escorted Bombers: The FW-190s attack an escorted formation in waves in the same manner as if there were no Allied escort present. At the moment of delivering the attack, however, one of the close-escort groups will proceed at once to the position below the bombers, where the attack-fighter wave or waves have been ordered to re-form, in order to give the FW-190s protection. The other two escort groups will usually take part in the attack as though the bombers were unescorted.

Attacks on Stragglers: No clearly-defined procedure appears to have been established for attacking bombers which have lost formation. Ordinarily, the Me-109s escorting the FW-190s refrain from chasing a lone bomber, but should a straggler or damaged bomber be encountered, one or more

fighters may peel off to attack, in which case standard or conventional methods of attack would be employed.

One prisoner who had attacked a damaged Fortress stated that he would first "stooge around" to establish what, if any, guns were out of action, or alternatively where damage had been sustained, in order to select the most favorable point from which to attack.

Attacks on Fighter-Bombers: In carrying out free-lance patrol missions against Allied fighter-bombers, aircraft of JG 4 flew in the same type of formation as that adopted by the escort groups when flying "company front" attacks on heavy bombers—that is, in elements of four, stacked up-sun and without attack-group waves. The size of the German fighter formation depended upon the size of the Allied fighter-bomber unit operating in the area concerned.



Tail Gunner's View: Here, poised to attack, is a "company front" formation. The FW-190s of the attack group have moved up from three stacked-down Vics into three lines abreast. Each of the three Me-109

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The German fighter formation usually flew 3,000 to 5,000 feet above the fighter-bombers; thus, if the Allied fighter-bombers were flying at 15,000 feet the German fighter force would usually attack from 18,000 to 20,000 feet. While airborne they received rapid and accurate information from ground control on the deployment of the Allied fighter-bombers operating in the area.

One of the prisoners stated that Allied fighter activities against front-line positions and in penetrations deep inside Germany are being viewed with increasing concern by the German High Command, and was of opinion that stronger and more frequent German reactions can be expected.

Armament and Range: None of the present prisoners had served in the FW-190 Gruppe of JG 4, and consequently could give no satisfactory

first-hand details of the armament of the FW-190 attack fighters.

However, the pilot of an FW-190 from the attack group, captured after making a belly-landing behind Allied lines on December 23, describes the armament of his aircraft as originally having consisted of two 20-mm. MG 151s and two 30-mm. MK 108 cannon, the latter under the wings. The 30-mm. cannon greatly interfered with the maneuverability of the aircraft, he said, and when the group moved to the Western Front at the beginning of November, they were removed.

This pilot also states that his plane was very heavily armored, but details are not available.

The Me-109s of JG 4 are armed with one 20-mm. cannon (MG 151) firing through the propeller hub, with 280 r.p.g., and two 13-mm. 131s, which fire through the engine cowling, each with 600 r.p.g.

TOP COVER

—SUN—

CLOSE ESCORT

Lead

Middle

Rear

escort groups is in position, with its 40-odd aircraft in flights of four, echeloned up-sun. Top cover is provided by one group, and two others fly close escort. Sometimes the escort fighters may be FW-190s instead of Me-109s.

The attack group of FW-190s is ready to dive into the bomber formation and the escort group of Me-109s will follow down to attack the bombers also and to cover re-assembly. (Diagrams on these pages are not to scale)

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majority of German fighter pilots, has led to over-emphasis being laid on R/T silence. It may often happen that the German fighter pilot in the air who has sighted Allied fighters and feels himself liable to be attacked will refrain from passing information to his leader for fear of the disciplinary action which might be taken were he in error; furthermore, new pilots are too busily engaged on flying their aircraft and maintaining formation to burden themselves with reporting information which may prove to be obvious to their more experienced leaders. This may be one of the reasons why, on occasion, Allied fighters surprise German fighter units.

Views on Bomber Tactics: The Lieutenant volunteered some views on the tactical procedure employed by Allied heavy bombers, particularly in reference to their approach to the target. The gist of his remarks is given here purely as an indication of his train of thought.

He expressed the opinion that the bombers would be somewhat less vulnerable to attack if the separate combat formations were to fly closer to each other. He likewise thought that if the width of the bomber stream were increased, with three or four bomber groups flying abreast instead of in line as at present, greater confusion would arise in the minds of those controlling the German fighter defenses; among other things, causing doubt as to the intended bomber objective.

In development of this theory he propounded the idea that if, for example, three groups fly abreast, the center group should lead to the target and the other two groups make their bombing runs from the right and left of the line of flight. He thought the return of the combat groups from the target could be made in either line-abreast or in-line formation.

A further theory put forward by this prisoner was that two bomber streams on adjoining and roughly parallel courses would tend to confuse and disorganize the disposition of the Defense of the Reich fighter formations. Finally, he stressed the view that if the formations flown by the groups and the composition of the bomber stream were to be varied on different missions, it would tend to complicate matters for the German fighter opposition.

Recommended Countermeasures: In the opinion of the present prisoners, evasive action by bombers is no defense against the "company front" tactics, and only tends to loosen the bomber formation. Fewer bombers can be shot down from a close formation than from a loose formation.

The prisoners state that if German fighter pilots observe that the tail guns are depressed or stationary, they consider them as out of action and attack accordingly; the same applies to top and ball turrets.

They thought that bomber gunners should open fire at maximum range in order to exploit to the full the moral effect of the massed fire from the B-17s, and considered it a mistake to wait until the attacking fighters approached to within normal firing range.

Although they were inexperienced in the possible effect of headlight tracer ammunition, they were strong in the belief that the firing of such ammunition would do much to disrupt the fighter formation and that some of the fighters might be deterred from attacking.

Efforts should be made by the bomber gunners, they say, to concentrate their fire on the leaders of enemy fighter formations, whose probable positions in the formation have been discussed on page 6.

Mission of 2 November: On 2 November, 1944, several of the present prisoners took part in an attack on a B-17 group which had strayed off course. Two Gruppen (I and IV) of JG 4, about 60 Me-109s, started from Finsterwalde and made rendezvous over Torgau with some 40 FW-190s of II/JG 4 and about 30 Me-109s of III/JG 4.

With the Me-109s flying escort for the heavily-armed FW-190s, the formation proceeded toward the Bernburg area. The B-17 group was sighted, and the attack-group leader, flying in the leading Vic of FW-190s, picked out one Fortress formation as a target and flew toward it.

Strict radio silence was observed, and the "company front" attack was pressed home by the FW-190s in three waves. No American escort was present, and the Me-109 escort groups followed down immediately in flights of four, picking out straggling B-17s. The prisoners assert that defensive fire was not heavy, and claim several B-17s for their escort groups, though they admitted that the disciplined and concentrated attack of the FW-190s was much more effective than their own efforts. After the attack, the prisoners and others of their unit landed at Magdeburg or Riesa and refuelled before returning to Finsterwalde.

Morale in JG 4: Flying personnel of JG 4 have to remain on their stations throughout the seven days of the week; dancing is prohibited and no visitors are allowed on the station. Pilots are kept on alert or standby status without any intermission.

All leave is suspended, and pilots are expected to continue to fly operational missions until they are killed, injured or taken prisoner. When not engaged on missions against heavy bombers, they are sent on free-lance fighter patrols against Allied fighter-bombers and occasionally on ground attacks on front-line positions.

Despite these hardships and restrictions, the prisoners still show the spirit which has characterized most German fighter pilots in the past: eagerness to fly and love of battle.

