

**RESTRICTED**

AIR HISTORICAL BRANCH

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SURVEY OF THE W.A.R. SITUATION

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TRANSLATED BY:-  
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I.

ENEMY SITUATION

A. The Allies have 7 Armies at their disposal in France and Belgium. The bulk of the Allied fighting units have, up to now, been stationed in the area of the British Army Group in Holland. At present there is evidence of a concentration in the Third American Army Sector consisting of several Tank Units. There are also another three Armies stationed in England made up of 16 Infantry Divisions, 4 Tank Divisions and 15 Tank Brigades, 4 Airborne Divisions and 15 Tank and Assault Battalions. There are also other forces which it is assumed are stationed in Northern Ireland and Scotland. On the Italian Front there are the Fifth American and Eighth British Armies with a total of 32 large Units and these forces are concentrated in the centre of the Front, aimed at Bologna. On the 27th September, one Parachute Brigade landed in Albania and on the Southern Dalmatian Islands. Regular Greek troops were landed on the Greek mainland from Egypt.

The centre of strategic concentration in the Southern Sector of the Eastern Front is on the Second Ukrainian Front in the area of Klausenburg. No Rumanian Troops are being employed here. On the Hungarian Front, there lines of enemy advance can be defined:-

- (i) From the area around Arad in a Westerly direction across the Theiss
- (ii) From a Southerly direction by Debrecen to the North
- (iii) From a Northerly direction via the Dukla Pass to the South West.

The aim of the enemy is to encircle the German Army Group operating in Hungary and to destroy it. In the area of Lwow there are 58 Infantry Units and 7 Tank Units. Eastward and North Eastwards of Warsaw there are 89 Infantry Units and 36 Tank Units and in the area North West of Kaunas-Dunaburg there are 134 Infantry Units and 48 Tank Units. The intended line of enemy attack in these areas cannot be predicted at present owing to the persistent unfavourable weather and to the shortage of petrol for reconnaissance purposes. It is probable that the enemy will advance in the direction of Cracow, continue the attack from the Warsaw bridgehead North of Warsaw in the direction of Danzig and continue the frontal attacks against Königsberg.

B. The Allies have 21,590 aircraft of all types at their disposal in the British/French area. On the French mainland they are used mainly in support of the Army from landing grounds near the front lines. A new close combat unit has been assigned to the Eifel-Coblenz-Frankfurt area.

On the Italian front the enemy has at its disposal 7989 Fighter close combat 4 engined-bomber and twin-engined aircraft in addition to transport units. It is also noted that units employed in the invasion of Southern France are being moved to Corsica and Italy.

Over the whole of the Eastern front the Russians have 19,000 front line aircraft at their disposal, the main concentration being in the areas of Lwow and Bialystock - Lublin. Long-range bomber units have been moved to forward fighting areas. For the air defence in areas behind the front, 4,150 aircraft are available including a few long-distance types.

C. The situation at sea is a little obscure owing to insufficient reconnaissance. In the area of the Channel and the French Coast, 8 battle ships, 34 cruisers, 5 auxiliary cruisers, 64 destroyers and 7 submarines were counted since the beginning of the invasion excluding those ships officially announced as lost. During the first days of October, 19 troop transports were brought into the Mediterranean area.

## II.

OUR OWN POSITION

- A. On land we are engaged in a struggle against a clearly superior enemy. By using the West Wall and all available fighting forces it has been possible for the time being to stem the British and American attack. The Army has been strengthened by Air Force personnel transferred to the Infantry and also by Home Guard units. Rear fortifications have been extended largely by the efforts of the civilian population. In Italy, the Army has temporarily succeeded in preventing the final attack of the enemy in the direction of the Po Valley. We are fighting against an opponent who has numerically superior forces made up of contingents from several Allied nations. In the South Eastern Area the planned evacuation of Crete and the Aegean Islands was slightly upset at first, but the bulk of the troops have been transferred to the mainland although losses were sustained. On the other hand, the withdrawal from Southern Greece was harrassed by air attacks against railway communications and by British Naval forces attacking the sea route between Southern Greece and Salonika. With the capture of Belgrade and Nish by the Russians, the only railway line which supplies troops fighting against Bulgaria and which transports troops from Greece was cut. This will result in the loss of considerable quantities of material which cannot be transported by motor vehicles owing to the shortage of petrol.
- B. From a Naval point of view, the centre of gravity lies at the Eastern exit from the Channel in connection with the evacuation of personnel and equipment from Holland, and in the Norwegian Waters.
- C. The air position over Germany is dominated by the search for an effective defence system. The withdrawals on various fronts have forced all units, schools, aircraft industries etc., on to relatively few airfields so that these are now overcrowded. The evacuation of all industries and other important industrial organisations from bomb threatened towns is gradually leading to a situation where every evacuation will result in a new concentration; thus, even small installations have become important and, therefore, in need of air protection. The weather is at present on the side of the enemy as it does not hinder the experienced blind-flying bomber units in England from taking-off and landing as much as it does the operations of German day-fighters. The use of "H2S" and "Oboe" makes bombing increasingly independent of weather conditions. A.A. guns and fighter aircraft are not available in sufficient numbers to prevent enemy attacks or to protect all important targets. As a result, Flak has been necessarily concentrated on particular points at the expense of less important objectives. The main Flak concentrations are, broadly speaking, as follows:-
- (i) Berlin - One of the largest industrial towns of the Reich which is still working, a main traffic centre and a "prestige" target.
  - (ii) Important industrial centres, namely the Ruhr, Upper Silesia, the brown coal district of Central Germany and industries such as synthetic oil plants, synthetic rubber works, dock-yards, aircraft and tank factories.
  - (iii) Traffic communication centres such as marshalling yards, main-line termini and aqueducts.

The effectiveness of the defence is limited by reason of the large number of objectives to be protected and by the nearness of the front. The whole system of technical development and armament production has now been

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reorganized but it is still too early to assess the results. Aircraft production is limited to a few types, mainly fighters, night fighters and ground-attack aircraft. Even the Me.262 which was intended as a fast bomber will, in future, be constructed as a fighter. The production of bombers has been steadily reduced and from October will be confined solely to the Ar.234. During September, 5,730 new aircraft were built, this being 13.5% below schedule. Nevertheless the strength of front-line aircraft has been increased by 279 making a total of 6762. The main reason for this is that the petrol shortage has restricted flying so that for most types of aircraft, replacements were higher than wastage. The fighter strength was increased by 374 to 1984, night-fighters by 155 to 1048 and ground-attack and night-attack units by 230 to 1525. It is anticipated that this upward trend will be continued during October. A serious feature is the drop in production of radio equipment which may result in reduced output of operational aircraft, especially night fighters. There is no information regarding the introduction of new equipment during the months of August and September. The effect of the destruction of installations at the Experimental Centre, Rechlin, cannot yet be estimated. The short-range of the Me.163 which has been flown on operations in limited numbers has proved to be a great disadvantage. It is anticipated, however, that considerable improvements will be effected as a result of further development now being carried out by Junkers. In the case of Flak equipment, the increased production of guns has not been met by the increased output of ammunition. This fact combined with the losses of Flak equipment on the Western Front has led to a shortage which has already resulted in a restriction of Flak fire.

### III.

#### ENEMY STRATEGY

##### 1. Land Warfare

On the Western Front the enemy will continue to try to break through the German defence belt, his aim being to make a strategic break into the North German Plain. If the Rhein-Main line can be broken, this main attack of the enemy will be supported later by a further advance from the area of Mainz in the direction of Central Germany. Large scale operations by airborne troops in the North German Lowlands will support the land troops in their initial attacks. At a given time the enemy will try to occupy the Ruhr area in this way. He will thus gain a jumping-off point for operating in the North German Lowlands by the creation of a bridge-head and at the same time, will paralyse industry and arouse the foreign workers to revolt.

Bearing in mind the result of the battle on the Cotentin Peninsula, it must be the aim of our Army to create a mobile reserve of the highest fighting potential. The effectiveness of our tanks is of paramount importance everywhere. Large-scale direct support of the Army by the Air Force is becoming more and more difficult and increasingly limited in scope. In view of the increasing Flak losses in ground operations and the necessity for concentration of Flak for the air defence of rear areas, it is clear that the Army will have to give up using this type of artillery against ground positions at the Front. In order to avoid all the difficulties of placing Air Force Flak at the disposal of the Army, it is of urgent importance that the Army be equipped with its own anti-aircraft weapons on a large scale.

The possibility of a combined air and sea landing in the area of the Heligoland Bight by the Fourth British Army now stationed East of London and other Allied airborne units now available in England will depend on the progress of the British and the Americans on the lower Rhine and in Holland. The prospects of success of such landings depend on the

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following factors:-

- (a) The coastal terrain
- (b) Conditions of the weather, sea and tides.
- (c) Navigational conditions
- (d) Strength of the German defences

An examination of the foregoing conditions leads to the following conclusions:-

- (a) Landings in the Frisian Isles will be very difficult but if the enemy is convinced of our weakness in that area he will try to land.
- (b) The enemy cannot succeed without airborne support and it may be assumed that airborne troops will be employed in spite of the long approach flight and its attendant losses. Even if only the Islands are in possession of the enemy, he would threaten to out-flank the whole of North Germany.
- (c) North Jutland is at present probably the most weakly defended sector. Landings are expected here on a large scale and also along the coast between Blaavands Huk and the Western exit of the Lum Fjord. From a strategic point of view a landing in Jutland would be of great advantage to the enemy as he would not be, as in the case of the Heligoland Bight, flanked directly on both sides.
- (d) The most favourable time for landing attempts is between the middle of December and the middle of January..

In the South, the enemy may, after capturing the Po Valley, attempt to press through to the Balkans to make contact with the Russian Army. If such contact were made it might well lead to military and political difficulties between Russia and Britain. In any case, it will be the German aim to hold the Po Valley at least and preparations for its defence are no doubt in progress.

The operations of the Russians in the South Eastern Sector indicate that they have built up their strongest concentration of forces in this area. They will try by the capture of Hungary to fight a way into the deep South flank of Germany at the same time securing the whole of the Balkans and thereby establishing a line of demarcation with the British. Then, or perhaps later, they would advance through Czechoslovakia into Germany. An attempt will also be made to strike Northwest through Vienna with the object of linking up with their troops advancing from the East and thus cutting off Eastern Germany.

To counter these aims it is imperative for us to fight as long as possible in Hungary and to hold the Drave-Danube Line and the Eastern border of Slovakia. The weakness of the Russian position lies in their increasing distance from their supply bases and they are now in the same position as Germany was when it was fighting far away from its frontiers. There are thus considerable chances of achieving success provided that the campaign is conducted offensively. The most important task, however, is the construction of defence lines.

The British attacks against German shipping in the Norwegian Coastal areas show that the British Air Force is aiming to disrupt our supply lines and the concentration of British-American Naval forces in North Eastern England and Scotland foreshadows an attack on North Denmark, possibly combined with a landing.

## 2. Air Warfare

In the East, the principal role of the Soviet Air Force is still that of Army co-operation and only 11% of their aircraft strength is suitable for long-range operations.

The change over from wood to metal construction combined with the use of better aero-engines will result in improved performance and the time has obviously passed when the Soviet Air Force could be regarded as inferior to our own. From now on we shall have to reckon with an enemy who is steadily increasing in strength and who possesses aircraft equal in performance to our own.

In the South, the capture of the Po Valley enabled the enemy to concentrate his air forces and the reduced flying distance to Germany permits a heavy bomb-load to be carried. This enables the Allied Air Command to continue its strategy of destroying key industries, communication targets and war production centres. The loss of the forward fighter bases South of the Alps will handicap the German defences. Hostile aircraft will only be picked up shortly before reaching the German border as the Alpine massif limits the range of our Radar equipment. With a limited number of fighter aircraft at our disposal, difficulties in maintaining serviceability will inevitably arise.

In the West, the two main aims of the enemy will be to continue his air offensive against Germany and, by use of his close combat formations, to give full assistance to the Army. In view of the success of his tactics in Normandy it may be assumed that the enemy will prepare for his operations against Western fortifications by concentrating all available Air Forces, together with strong forces of artillery. Attempts are already being made to destroy lines of communication in North Holland and in the Ruhr, and the movement of heavy equipment on the Rhine and the Dortmund-Ems Canal is being subjected to heavy attacks. Supply routes from the industrial areas are also being attacked presumably with the object of cutting off these vital areas from the front. The use of four-engined bombers in direct support of the Army, particularly at the beginning of large-scale attacks, is considered probable.

The effect of the 5.6 ton bombs used by the enemy, coupled with their precision of aim constitute a serious danger to the fortifications of the West Wall with its heavily-manned dugouts and emplacements. It has become imperative to build dispersed deep defence positions. Our present fighter strength is such that it can offer only limited protection to ground installations and for the time being the Army will have very restricted direct support from the Luftwaffe. Over Germany, the enemy will use the bulk of his air forces against those industries which are vital for the prosecution of the war, namely synthetic oil works, fighter aircraft factories, tank factories and synthetic rubber works.

The enemy is said to have completed successful experiments in the use of the Mosquito as a torpedo-carrier and they will probably be in operation by November. The purpose of the enemy's air attacks is to starve the front and thus cause the final collapse of the German armed forces. The strength and quality of his Air Force give him a good chance of achieving this aim.

## IV.

COUNTERMEASURES1. General

Defence is the first immediate consideration but at the same time preparations must go on for a decisive offensive at a later stage as it is only by offensive warfare that Germany can be saved. If this aim is constantly borne in mind, then even the defence measures which must be taken will form a basis for future offensives. If, during the defensive phase, forces are trained for the final offensive they should not be split up or used prematurely even to relieve a critical situation.

In the armament industry, production will be concentrated on the most important weapons for attack, i.e. automatic rifles, machine guns, Flak guns and special tanks. The main items for air warfare will be the production of fighters, fighter-bombers and ground-attack aircraft, but the existing nucleus of new bomber formations should be extended. The use of improved V-weapons on all fronts and possibly against American cities will have to be considered.

Since the beginning of the War, the Western Enemy has dropped 300,000 metric tons of bombs (125,000 tons during 1944 alone) on targets in Germany. In spite of this weight of attack, which was concentrated against a limited number of targets, the collapse of Germany could not be achieved. The question, therefore, arises as to what extent we should use long range weapons against the Greater London area. Up to now approximately 8,000 metric tons of this type of weapon have been launched, of which, according to enemy sources, only 4,000 tons fell within the target area. One should also consider the question whether in view of the relatively small effect on the enemy's home front, of even larger quantities of high explosive, it would not be more effective to use the present and future V-weapons against the rear areas of battle fronts, thus having a more direct influence on ground operations.

2. Land Warfare

In the East an offensive defence must be maintained, especially in Hungary and East Prussia, by constant attacks aimed at pinning down the enemy and by rapid switching of mobile concentrations. Rear defence zones must be constructed on the South Eastern border of Germany, in Slovakia, Poland, Silesia and East and West Prussia. One must, however, bear in mind that defence positions are of little use without adequate troops to man them. On the Western Front, we are on the defensive. After reinforcements, particularly of the Luftwaffe, an effort must be made to recapture the Channel Coast, our final aim being the destruction of the Western enemy. Although the enemy is strong on this front, his combat area is, by comparison with the Eastern Front greatly limited, and a strategic offensive in the West appears, therefore, to hold out greater chances of success.

3. Sea Warfare

At sea, every effort should be made to interfere with the enemy's supply routes, particularly around the Dutch Coast, by the use of submarines, E-boats, mines and by V-weapon attacks on ports. A large scale increase and further technical developments of this type of warfare are imperative.

#### 4. Air Warfare

The situation in the air is still dominated by the supremacy of the Western Powers, but there has been a steady strengthening of German defences. Very strong concentrations on Flak at vital armament industries and of fighter aircraft in Central Germany should, under good weather conditions, result in better chances of success. Improvements have also been made in passive air defence. Production of fighters has reached a new peak and is still rising and this will permit the creation of a fighter force from which one can confidently expect decisive attacks against the enemy. The strength of this fighter arm must be maintained at all costs so that future operational losses will not reduce its effectiveness.

The following observations on the air defence of the Reich are based on the views of the Kommodore of I/JG.300:- The main question to be considered is the possible success which can be achieved by the latest types of fighter aircraft whose operational use has been suggested, although they will not be available in large numbers for some time. The enemy's fighter defence of bomber formations is divided into two groups, one operating free-lance around the whole bomber formation and the other giving close protection to the bombers. This system of fighter protection is very effective owing to its manoeuvrability and this coupled with the loose-flying formation of the bombers makes it unlikely that the present rate of losses will be increased. The problem of the air defence of the Reich is at present not so much a question of how to concentrate our fighter strength but of how to attack effectively the enemy's fighter cover and thus be able to strike at the bombers; and of how our own fighter losses can at the same time, be reduced. Having regard to the performance of the Me.109 and FW.190 against enemy types, it is apparent that to achieve any decisive rise in successes the ratio of escorting fighters to assault aircraft would have to be increased to at least 4 to 1 even to combat the enemy fighter cover alone. At present, not only are too few enemy aircraft being shot down but losses inflicted by escorting enemy fighters are so high that the units are being drained of their resources. The position will be worsened by the fact that Tempests and Spitfires can now operate over the centre of the Reich. The solution of the problem of successful defence lies, therefore, in counter action against the enemy fighters which are superior both in numbers and performance. At present our aim is to secure numerical superiority over the opposing fighter escort in the centre of the combat area. By putting a large number of fighters into operation, we should undoubtedly succeed in shooting down a considerable number of enemy aircraft in the first operations, and our own losses should be within reasonable limits. As countermeasures the enemy might then either change the tactics of his fighter escort or avoid making attacks in weather conditions which would favour the operation of strong German fighter formations. It is possible that the enemy, recognising the limits of large scale operations by German fighters, would by constant attacks attempt a war of attrition. The German fighting force could not keep pace with such conditions for very long as the number of serviceable aircraft would be so reduced that the use of the term "large scale operation" would no longer be justified. The enemy could also change the tactics of his fighter escort and by concentrating his forces, soon establish equality or superiority.

The above considerations lead to the conclusion that a change in the air situation over the Reich is not possible with the forces at present available. If, on the other hand, the German Air Force could operate in sufficient strength with the new types of aircraft, then we might effectively beat the enemy's fighters and thus bring about a change in the whole situation. The single-seater fighter Me.262 is capable of fulfilling these expectations.

The operational aim would be to intercept the bomber formations and their escorting fighters at or before the German frontier and force them to

jettison their auxiliary tanks. The German Air Force would thus regain not only technical but also moral superiority during the combat. The enemy would be forced to keep in closer formation, the fighters would have to give up their free-lance tactics in which they range over nearly the whole German Front and the bombers would have to keep closer together on account of their weaker escort. They would, therefore, make a better target for our defences.

Assuming that one of our new fighters could replace about 5 of the older types, it follows that 20 high speed fighters would release 100 other fighters to attack the bombers. The losses in high speed fighters would be bearable as owing to its superior speed the aircraft would be vulnerable only during take-off and landing. After achieving air supremacy over Germany, we can then begin to attack the enemy air forces at assembly points and on their landing grounds. Surprise attacks against assembling bomber formations would also force the enemy to use a part of his fighter strength for protection thus weakening his fighter effort at the front and on escort duty.

In view of the front withdrawals and the reduced combat area, the following suggestions are made:- Fighters and flak artillery of the Reich defence should be amalgamated under one Air Defence Corps (At present the Jagdkorps I). The Luftgaukommandos would be relieved of the command of Flak artillery and would deal with A.R.P., administration, and with ground organisation and supplies in so far as these were not concerned with air defence. Four to five fighter divisions would be allocated for the defence of the Reich and these would control the fighter aircraft in their area subject to the commands of the Air Defence Corps. The fighter divisions would also be responsible for their ground organisation, supplies, and signals communications. For this purpose there would be at each Headquarters a Senior Officer for ground organisation, a Senior Supply Officer and a Senior Signals Officer. These Senior Officers are at the same time Formation Commanders and are all stationed at the Divisional Battle H.Q. Thus, Command centres would be created which would be directly responsible for operations, and unity of command would thus be assured. All airfields required for fighter operations would have small reporting centres consisting of four to six men directly controlled by the Fighter Division concerned. These reporting centres would pass their reports and requests of the units direct to the Divisions and Senior Officers concerned, thus eliminating unnecessary channels of communication and saving manpower. Flak artillery would be concentrated in Flak Divisions under the direct command of the Air Defence Corps which will work in close co-operation with the Fighter Division concerned. There would be a General of Flak Artillery at the G.H.Q. of the Air Defence Corps, and he would have the powers of a G.O.C. but he would, in turn, come under the command of the General Commanding the Air Defence Corps.

Active air defence necessitates:-

- (a) More day and night fighter attacks, even at the expense of other operational requirements.
- (b) Priority construction of, and full operational use of all available modern fighter aircraft.

Passive defence necessitates:-

- (a) Wide-spread dispersal of industry and commerce.
- (b) Dispersal of all rail traffic through the use of different termini.
- (c) Camouflage of even the smallest installations.

- (d) Increased protection of railways.
- (e) Construction of ferries in the vicinity of all important rail and road bridges.

The following conditions are essential for successful air defence as far as day and night fighter operations are concerned:-

- (a) Superiority in speed and climbing performance.
- (b) Increased range to approximate that of the enemy.
- (c) Good visibility, for at great speeds the advantage lies with the pilot who first sights the enemy. For this purpose a system of heating is required to prevent dimming and icing of the fighter cockpit.
- (d) Increased maximum boost height. (Exhaust gas turbines)
- (e) Further development of navigational aids in fighter aircraft to enable formations to take off and land during bad weather.
- (f) A new system of fighter control. An attempt should be made to perfect an instrument which would indicate the position of the Fighter by a dot which would move as the aircraft changed position.
- (g) Increased safety when getting out of the aircraft (catapult seat).
- (h) Improved armament which would enable the fighter to fire from great distances with a good chance of success and at the same time to remain outside the effective range of enemy bombers. As much armament as possible is necessary in order to concentrate as heavy a fire as possible within a short time.
- (i) Further development of the jet fighter, already operating successfully, as this is the only fighter that can effectively combat the American high altitude bomber.
- (j) Dispersal of fighter units by the use of motor roads (Autobahnen) as runways.

The following are essential for night fighter attacks:-

- (a) Extension of night fighter control aids.
- (b) Intensification of radio warfare with the aim of restricting enemy W/T and Radar over German territory.
- (c) Increased operational use of close night-fighter control (Himmelbett System) as a precautionary measure, in Western areas.
- (d) The operational use of the Me.262 and Do.335 against Mosquito formations.
- (e) Airborne Radar equipment, showing on one screen one's own position and that of enemy aircraft, thus giving freedom from ground control, which is liable to interference.
- (f) Installation of a homing device with continually changing frequencies to counteract enemy jamming.
- (g) A.F.P.I. which can be easily serviced, of small dimensions and light in weight.

- (h) Long and short wave receivers of small dimensions for R/T.
- (i) Coupling of scanner with armament for blind firing.
- (j) Parking of single and twin engined night fighters in rain and snow-proof hangars.
- (k) Fitting of aircraft engines with gas exhaust turbines.

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