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Note:

The political, ideological and economic aspects of the war are dealt with separately. The Far Eastern theatre of operations is not discussed.

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Present strength of opposing forces

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1. The enemy

(a) The Allies have 7 Armies at their disposal in France and Belgium. Most Allied operational divisions were formerly concentrated in the British Army Group Command Area in Holland. At present a concentration, including several armoured units is being built up in the American 3rd Army area.

In England there are a further 3 armies with 16 infantry divisions, 4 armoured divisions, 5 armoured brigades, 4 airborne divisions and 15 armoured and assault battalions. In addition there are presumably more forces in Northern Ireland and Scotland.

The Allied front in Italy is held by the American 5th and British 8th Armies with a total of 32 large units. Forces are concentrated in the centre of the front, driving in the direction of Bologna.

On 27 September 1 Paratroop Brigade landed in Albania and on the southern Dalmatian Islands.

Greek regular troops from Egypt were landed on the Greek mainland.

On the southern part of the Eastern front the enemy is concentrating on the 2nd Ukranian front in the Klausenburg area. No Rumanian troops are in action in this area.

In Hungary 3 enemy lines of attack are apparent:

(1) westwards from the Arad area over the Tisa (Theiss),

(2) from the south via Debrecen to the north,

(3) from the north via the Dukla Pass to the south-west.

The enemy is aiming at the encirclement and destruction of the German Army Group in Hungary by outflanking it on both sides.

There are 58 infantry and 7 armoured "units" in the Lemberg area, 89 infantry and 36 armoured "units" east and north-east of Warsaw and 134 infantry and 48 armoured "units" in the area north-west of Kaunas - Duenaburg.

The intended enemy lines of attack in these areas are not absolutely clear, as reconnaissance has been limited by shortage of fuel and continuous bad weather. Attacks will probably be made from the Baranow bridgehead in the direction of Cracow, from the Narew bridgeheads north of Warsaw in the direction of Danzig, and the frontal attack on Koenigsberg continued.

(b) The Allies have 21,590 aircraft of all types at their disposal in western Europe (Britain and France).

Close support formations are concentrated in France and take off from airfields near the front.

A newly arrived close support Corps has been allotted the Eifel - Coblenz - Frankfurt - Saarbruecken area as its field of operations.

In the Italian theatre the enemy has at his disposal 7,089 fighters, close support aircraft, four-engined bombers, twin-engined aircraft, as well as transport aircraft. In addition, air craft formations used in the invasion of southern France are being moved back to Corsica and Italy. Exact details of numbers and strength are not available.

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The Russians have 19,000 aircraft of all types on the Eastern front. Formations are concentrated in the Lemberg - Reichshof and Bialystock -Lublin areas. Long-range bomber formations have been brought up to airfields near the front and 1 group has been moved into the area south of Bucharest. 4,150 aircraft, including a few long-range bomber formations, are based in the enemy rear for air defence duties.

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(c) The estimate of the situation at sea is incomplete owing to inadequate reconnaissance.

Excluding officially reported losses, 8 battleships, 34 cruisers, 5 auxiliary cruisers, 64 destroyers and 7 submarines have been observed in the Channel and in French waters since D-day. The concentration of British and American warships in ports in northern England and Scotland is increasing.

19 troop-transports were sent into the Mediterranean at the beginning of October.

2. The German situation

(a) The German ground situation is characterised by the struggle against overwhelming enemy superiority.

By using all available forces in the West Wall, the Anglo-American assault has been halted for the time being. Army units are being reinforced by personnel released from the Air Force for employment as infantry and by men of the Volksturm. Extensive use was made of the civilian population in construction positions in the rear.

In Italy the Army has so far succeeded in preventing the enemy from breaking into the Po Valley. On this front numerically superior German forces are fighting against an enemy army composed of contingents from many Allied nations.

In the south-east the initial stages of the planned evacuation of Crete and the Aegean islands were carried out without much interference and, although some losses were sustained, most of the troops were brought across to the mainland.

On the other hand the withdrawal from southern Greece was effectively disrupted by air attacks on railway communications and by British naval attacks on the sea route from southern Greece to Salonica.

The only railway line, by means of which troops on the Bulgarian front could be supplied and the withdrawal from Greece carried out, was cut when the Russians captured Belgrade and Nish. This will result in the loss of important stocks of material which cannot be carried by lorry owing to the prevailing fuel shortage.

The withdrawal of Army Group E divisions (leaving heavy equipment behind) may be a success if energetically carried out, but great difficulties will be encountered owing to terrain conditions at this time of the year.

The anticipated main Russian drives on Cracow and East Prussia will encounter frontal opposition from a defence system in depth, parts of which have already been extensively consolidated.

German forces have been concentrated to make allowance for the expected enemy breakthrough attack north of Warsaw between the Narew and Vistula rivers.

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The heaviest fighting on the northern part of the Eastern front is taking place in the Baltic provinces and in East Prussia. Army Group North, cut off in Latvia and Lithuania, is in a difficult position.

Fighting with Finnish units and increasingly difficult weather conditions are hindering the withdrawal of German units from Finland.

(b) At sea naval forces are being concentrated at the eastern approaches of the Channel in connection with the return of personnel and equipment from Holland, in Norwegian waters for the supply of units based there and to maintain the flow of raw materials, and on a smaller scale in the Aegean.

(c) The most vital factor in the air situation over the Reich at the moment is defence. As the fronts roll back operational units, flying-schools, arcraft industries etc. have been crammed into comparatively few airfields and even the 2 or 3 emergency airstrips, which are part of every airfield, are overcrowded.

The evacuation and dispersal of all industrial plants and vital supply services from cities threatened with air attack is slowly leading to a situation in which every transfer will produce a fresh concentration,

Consequently every minor target has become more important and is beginning to claim protection from the Luftwaffe.

Passive defence (dispersal, camouflage, A.R.P.) can limit the effect of enemy air attacks but can never prevent them.

At the moment the weather is on the enemy's side. Borber formations used to blind flying can take off and land in England more easily than German pursuit fighters from their bases. H2S, Meddo and Oboe are making bombdropping increasingly independent of the weather.

A.A. defences and fighters are not available on a large enough scale to prevent enemy incursions or to provide adequate protection for every target.

Consequently there are certain places which justify the concentration of $\Lambda_{\bullet}\Lambda_{\bullet}$ to the disadvantage of less important targets. These are roughly as follows:

(a) The capital

being one of the largest cities of the Reich still in production, a centre of communication and a "prestige" target,

(b) important centres of industry:

the Ruhr, Upper Silesia, the lignite area of central Germany, industries such as hydrogenation plants, synthetic rubber plants, naval shipyards, aircraft and tank factories etc;

(c) centres of communication:

marshalling yards, points where main routes converge, bridges over large rivers, the Mittelland canal, the Kaiser Wilhelm canal etc.

The abundance of targets to be protected and the proximity of the fronts force limitations on the defenders.

All developments and production in the technical and armaments fields are controlled by a new organisation. It is still too early to observe the effects of the transfer of production to the Reichs Ministry of Armaments and War Production.

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Production is limited to a few types, mainly fighters, night fighters and ground attack aircraft. The Me 262, formerly a high-speed bomber, is also to be turned out as a fighter until further notice. Bomber output has been steadily reduced and from October only bombers capable of very high speeds (Ar 234) will be produced.

In September 3,730 aircraft were produced, i.e. 13.5% below the delivery quota. In spite of this, front-line aircraft strength has risen by 279 to a total of 6,762. This is mainly due to the fact that, owing to the fuel shortage, operations have been limited and consequently deliveries to most operational units have exceeded losses.

Fighter strength rose by 374 aircraft to 1,984, night fighters by 155 to 1,018 and ground attack and night ground attack aircraft by 230 to 1,325.

This change which we observed in September will presumably have continued in October.

The decrease in deliveries of R/T sets is still serious and may result in a lower output of fully serviceable aircraft, especially in the case of night fighters.

No information is available regarding the introduction of new equipment in August and September. The effects of the destruction of installations at the Rechlin experimental station on current developments and tests cannot be estimated.

The very low endurance of the Me 163, which has been used on operations to a limited extent, has proved a disadvantage. Further developments in progress at Junkers give promise of an increase of about 15 minutes.

The increased production of A.A. guns has not been followed by a correspondingly higher output of A.A. ammunition. This and the loss of ammunition stocks in the West have produced a serious situation which has already led to certain reductions in expenditure

II

Possible courses of action by the enemy

1. On land

In the West the enemy will and must continue his efforts to break through the German defence belt. His aim here is to take the whole of Germany by making a strategic penetration into the north German plain.

This main enemy drive will be supported later by a north-easterly thrust into central Germany from the Mainz area, provided the Rhine defence line has been taken.

Both attacks conform to historic principles of warfare.

Large scale airborne operations in the north German plain will help ground troops to gain their initial objectives. When ready, the enemy will attempt to occupy the Ruhr in this way. By forming a bridgehead, he will create a jumping-off position here for further operations on the north German plain, cripple industry and incite foreign workers to revolt.

Quite apart from the present situation and in the light of lessons learned on the Cotentin peninsula, the Germany Army must make every effort to build up first-class mobile reserves.

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It is important to note that the battleworthiness of armoured units is apparent everywhere.

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At present direct air support for the Army on any appreciable scale is becoming increasingly difficult and more limited as regards time and space.

This also applies to the employment of A.A. defence.

The extent to which a defending force must withdraw A.A. from the battle-front is determined by the degree of air superiority achieved by the opposing air forces.

This will present difficulties in view of the method in which A.A. has been used until now. Since the beginning of the war the German Army has used A.A. units for ground operations, and particularly for anti-tank defence, to an extent which is not in accordance with the requirements of air warfare.

As more and more $\Lambda_{\bullet}\Lambda_{\bullet}$ guns are lost in ground operations and successes are achieved only under particularly favourable conditions and as it becomes increasingly necessary to concentrate $\Lambda_{\bullet}\Lambda_{\bullet}$ for air protection in the rear, the number of $\Lambda_{\bullet}\Lambda_{\bullet}$ guns used by the Army at the battle-front must be reduced.

If all the difficulties arising from the subordination of Air Force A.A. units to the Army and the apparently inevitable misuse of A.A. in the main defence zone are to be prevented, then there is a greater need for the Army to be adequately equipped with its own A.A. defences.

The concentration of A.A. at transport and industrial targets is therefore self-evident. Furthermore, light batteries must be concentrated to protect heavy batteries against low-level attacks. In the light of these requirements, the use of A.A. for gound operations will steadily decrease.

British and American progress on the Lower Rhine and in Holland will determine whether a combined air-sea landing will be made in the Heligoland Bight area by the 4th British Army (assembled in the area east of London) and the Allied Airborne Corps (still standing by in England).

The success of a large-scale enemy landing in the Heligoland Bight and Jutland depends on 4 main factors:

(a) the formation of the coastal areas,

(b) the weather, currents and tides,

(c) conditions of navigation,

(d) German defence.

Examination of these circumstances may produce the following conclusions:

(a) Landings in the Frisian Islands area will encounter great difficulties.

Landings will be attempted if the enemy is convinced that the area is weakly held.

(b) The enemy will not be able to succeed without airborne landings. These are to be expected, even though losses will be incurred in the long approach flight. The enemy will accept these losses, however, in the hope that aperations of this type will help bring the war to an early conclusion.

If the enemy occupied only the islands the whole of northern Germany would be threatened.

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(c) Northern Jutland is the weakest sector in the defence system at present.

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Large-scale landings may be expected here, particularly in the coastal area between Blaavands Huk and the western outlet of Lim Fiord.

As far as strategy is concerned, a landing in Jutland would be more advantageous for the enemy. Here the enemy would not be outflanked on both sides, as is the case in the Heligoland Bight.

(d) The most favourable time for landing attempts is after the commencement of high pressure weather conditions between mid-December and mid-January.

Successful enemy landings in the Heligoland Bight and Jutland will have considerable political effect on Sweden. Furthermore, Norway will be cut off.

After taking the Po Valley, enemy forces in the South may endeavour to branch off into the Balkans and link up with the Russian army.

At present no forecast can be made of military and political difficulties which may arise between England and Russia here. There is no doubt, however, that there are considerable weaknesses in the enemy's front in this area.

In any case, the minimum aim of the German defence will be to hold the Po Valley. The consolidation of extensive defence zones is probably already in progress.

In the south-east, Russian operations indicate that they have built up one of their biggest concentrations here.

They will attempt:

(a) to fight their way into the extended southern flank of Germany by taking Hungary, thereby gaining control over the Balkan States, and then, probably at the same time maintaining a demarcation line against the British, to push forward through the Protectorate to Germany, and

(b) to turn northwards through Vienna with the object of cutting off eastern Germany by linking up with forces advancing from the east.

The Germans must continue fighting as long as possible in Hungary and frustrate these enemy aims by holding the old Drave-Danube line and the eastern frontier of Slovakia.

The winter will have relatively little effect on operations in Hungary.

The Russians! weakness here is that they are moving further and further away from their supply base.

They are in the same position as Germany in earlier campaigns.

There are now possibilities of important, decisive successes, but these can be achieved only by offensive strategy.

For the time being however, the construction of defence lines is the most important consideration.

Successful operations by Russian airborne forces can be prevented if we enlarge our defences standing-by in the rear.

Units of Army Group E which are moving from south to north are a positive factor, even if they are at present engaged in heavy fighting in

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the Balkans with the Russians, Bulgarians and British.

Its movement northwards is not merely a retreat and may become an offensive against the flanks and rear of Russian forces fighting in Hungary.

Even though the loss of Croatia and of German influence in that area may appear disadvantageous, the desire to prevent this happening should not lead to the abandonment of the offensive against the flanks and rear of Russian forces in Hungary.

After the enemy has discontinued his attempts to break through the Carpathian passes fresh strategic opportunities to penetrate into Germany are open to him if, after regrouping, he pushes forward from the south-east into western Slovakia and from the Baranow area in the direction of Cracow. The enemy expects to capture the Baltic ports, take control of the Baltic and cut off the supply of raw materials from Sweden by breaking out of the bridgeheads north of Warsaw and reaching Danzig and by a frontal attack from the east on Koenigsberg.

Available forces and weather conditions will hardly permit the launching of a German offensive in Finland. As many sources of raw materials as possible must be held and the iron-ore supply routes kept open.

British operations against Germany shipping off the Norwegian coast indicate that the $R_{\bullet}A_{\bullet}F_{\bullet}$ intends to cut supply lines.

Furthermore, Anglo-American warship concentrations in northern England and Scotland indicate an attack, and possibly a landing, on northern Denmark with the object of creating a direct threat to German transport movements.

Surveillance of sea areas will be a particularly important task for German sea and air forces.

2. In the air

Russian aircraft construction and production continues to concentrate on Army support types, the zone of operational bases being extended to approximately 200 km. Only 11% of the aircraft are suitable for long-range operations.

In spite of the further increase in fighter strength, a different situation must be expected in 1945_{\bullet}

The change-over from wooden to composite or all-metal construction means a higher performance, which will be maintained by the use of better engines. The days when the inferiority of the Russian air force could be taken as a matter of course are past. German aircrews will have to deal with an airforce of steadily improving standards and increasing strength and with aircraft equal in performance to their own.

In the south enemy massed air operations have been facilitated by the capture of the Po Valley. The shorter distance to the Reich will enable fourengined bombers to carry a larger bomb load. This is in accordance with the objective of Allied air strategy, which is to make destructive attacks on key industries, transport targets and war production centres.

The lack of advanced fighter bases south of the Alps will put the German defence at a serious disadvantage. Approaching formations will not be picked up until shortly before they reach the German frontier as the Alpine mountains hamper and limit the development of German radar installations. In view of the very limited number of German fighters available, considerable difficulties may arise with regard to assembling aircraft in readiness of action and sending them up to intercept.

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In the west the enemy will make further efforts to

- (a) carry on the offensive against the Reich with his strategic air forces and
- (b) to smooth the way for the Army with his tactical air forces.

In conformity with the tactics used in Normandy, the enemy will probably concentrate all available air forces and use massed artillery to break through the western defences. The intention of obliterating all communications in northern Holland and the Ruhr is already apparent. Movements of heavy war equipment on the Rhine and Dortmund Ems canal are subject to the heaviest enemy counter-measures. Operations against supply routes leading into the industrial area and against power supplies are aimed at destroying these vital factors in the defence front.

Four-engined bombers may be used at any moment in direct support of the Army, particularly at the opening of offensives.

The increased effect and greater accuracy of enemy 5 or 6 ton bombs are a serious threat to the heavily-manned bunkers and close combat posts of the West Wall, which can be penetrated and put out of action.

The plan to exchange the West Wall dug-outs for dispersed positions in depth with good protection against splinters is imminent in view of the development of enemy weapons. The present fighter situation makes it entirely impossible - or within limited time and space only partially possible - to drive the enemy out of the air above the battle-front and thus protect ground positions. The army will have to manage with very limited direct ground support by the Luftwaffe until further notice.

In the Reich the enemy will use the bulk of his air forces against industries whose work has a direct bearing on the continuation of the war. These are as follows:

- (a) hydrogenation plants,
- (b) fighter production.
- (c) tank production,
- (d) synthetic rubber plants.

Moreover, attacks are to be expected on essential auxiliary industries delivering vital components such as ball-bearings, aluminium, saltpetre, blast furnaces and suchlike.

The enemy will also disrupt the flow of supplies to the front and the methodical interplay of the economic system in the Reich by incessant attacks on transport targets.

Enemy experiments to adapt the Mosquito as a torpedo-carrier are nearing completion. They are described as successful and the aircraft will probably be used operationally in November.

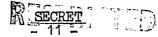
Enemy air strategy is aimed at starving the front, thereby causing the collapse of the German Wehrmacht.

He has prospects of achieving this aim with an Air Force of such quality and strength.

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III

Suggested counter-measures

1. The campaign in general

A defensive strategy must be pursued for the time being. At the same time men and material must be assembled for the decisive offensive to be launched later.

Liberation, relief and order cannot be achieved in the long run by a "wait-and-see" policy.

We must therefore attack.

Only an offensive policy will save Germany and Europe.

Strategic defence cannot be avoided at present, but is justifiable only as long as and in so far as it serves the purpose of preparing for a decisive offensive.

It is essential that the hard realities of the moment be seen in their true perspective and that everything be done with a view to the final offensive battle and not to minor forms of relief.

Thus, even the defensive measures at present in force will embody the necessary offensive spirit. Commanders and troops will regard victory as a certainty and will act accordingly.

If, when on the defensive, forces should be assembled for the major objectives of a final offensive, they should not be dispersed and used up prematurely in defensive fighting, even in the event of further reverses or crises.

The armament industries will concentrate on the main weapons for attack: Light automatics, machine-guns, anti-tank weapons, A.A. guns, assault guns, tanks and still more tanks.

Fighters, fighter-bombers and ground-attack aircraft take first place in aircraft production.

New bomber units, still in the preliminary stages of formation, should be enlarged.

The use of improved V-weapons in all theatres of operations must be considered and the possibility of using V-weapons against American cities, particularly New York, must be examined.

Since the beginning of the war the enemy in the West has dropped 300,000 tons of bombs on the Reich, 125,000 tons in 1944 alone. In spite of this considerable expenditure of bombs, dropped in massed raids on a limited number of targets, Germany did not collapse.

When one considers this, one wonders to what extent against the London area we should have to employ the long-range weapons which we originally hoped would decisively change the general situation. So far about 8,000 tons of these missiles have been launched of which, according to the enemy, only about 4,000 tons reached the target.

Moreover, it has still to be determined whether, in view of the relatively slight effect of even large amounts of high explosive against the enemy home front, the use of present and future V-weapons against the enemy rear on all fronts would not have more effect and influence the development of the ground situation more directly.

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2. On land

Special measures will be introduced to reinforce the Army. In addition, volunteer PoW's and armament workers will be formed into European Liberation Units to free their homeland as well as being propaganda troops for the European social order.

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A considerable increase is expected from the Russian Liberation Army.

East:

There will be "offensive defence" by further attacks aimed at pinning the enemy down and quickly changing concentrations, especially in Hungary and East Prussia. Rear defence zones will be set up on the south-eastern frontiers of the Reich, in Slovakia, Poland, Silesia and in eastern and west Prussia. It must be borne in mind, however, that defence positions are of no use if there are no troops available to occupy them.

North:

Norway will be held.

Defences in Denmark and north-west Germany must be ready for enemy landing operations.

West:

A defensive policy will be continued until the Wehrmacht, and particularly the Luftwaffe, has been brought up to strength. An offensive aimed at regaining the Channel coast and ultimately at the destruction of the enemy in the West will then be launched.

The enemy on this front is certainly stronger, but compared with the Eastern front his battle area is much more limited. He cannot withdraw and therefore a strategic offensive in the West appears to have more chance of success.

South:

First, the defensive will be maintained and the enemy prevented from penetrating as far as the Alps.

3. Guerilla warfare

Terrorist and sabotage groups consisting of Germans and pro-German foreigners should be formed on a large scale.

Acting on Bolshevik lines in co-ordination with Army operations, they would contribute to the creation of disorder behind the enemy front and . amongst the civilian population, particularly in the West. French and Walloon SS units in particular could be called upon for this purpose.

In this way the peace-loving elements of these countries occupied by . the enemy can now be appealed to by propaganda.

According to developments in the situation, partisan groups will be reinforced later at strategically important points by paratroop and airborne units which are already being formed on a large scale.

4. At sea

Arrangements must be made to disrupt enemy sea supplies at least off the Dutch coast by the use of naval small craft and other means (submarines, motor torpedo boats, boats charged with explosive, one-man craft, mining, V-weapon bombardment of harbours).

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The number and quality of these weapons must be increased extensively.

5. In the air

(a) In the West the enemy continues to maintain his air superiority. The German defensive policy is, however, characterised by increasingly stronger defence of the Reich.

Very heavy concentrations of $A_{\bullet}A_{\bullet}$ at vitally important armaments plants and of fighters in central Germany have produced absolutely new conditions for attacker and defender when the weather favours the latter. Progress has also been made in the field of passive defence (decentralisation, camouflage, shelters) which indicates a strengthening of defence.

Fighter production has reached an unprecedented level and is still rising. This will enable a fighter arm to be formed and sent into action which, it is confidently expected, will deal decisive blows against the attacking enemy air forces.

Further efforts must be made to make this fighter arm even stronger. A deviation from the course of action once taken leads to a decline in battle strength after several days of consecutive heavy action, and the required basis of a decisive victory, namely the formation of a battleworthy whole, becomes impossible.

A successful defence is not possible unless adequate forces are built up initially and kept up to strength. A powerful defence in depth will provide the basis and potential for the creation of offensive forces.

(b) In the following the views of the C.O. 1st. Staffel 300 Fighter Gruppe, Hauptmann Stamp, are set forth, in which important questions regarding air defence are examined.

Views on the prospects of success of the newest superior fighter types are dealt with and it is suggested that they be used in action even though they will not be available in large numbers for some time.

Enemy bomber formations are protected by two types of fighter escort:

(1) a strategic group (free-lance operations along the bomber route), and

(2) a tactical group (direct cover for the main bomber formation).

This escort system is very effective owing to its flexibility and the possibility of quick concentration, and when used in conjunction with dispersed bomber formations it is almost impossible to increase the number of aircraft being shot down at present.

The present problem of air defence over the Reich is not so much a question of how to concentrate our fighter forces to the greatest possible extent, but:-

- (1) how to deal effectively with the enemy fighter escort and clear the way to the bombers, and
- (2) at the same time, how to reduce German fighter losses.

In view of the performances of the Me 109 and Fw 190 as compared with enemy fighter types the numerical advantage of fighters in intercepting units must be increased to at least a ratio of 4 to 1 over the enemy fighter cover if German successes are to be improved to a decisive degree.

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At the moment not only too few enemy bombers are being shot down, but, owing to enemy fighter escorts, German fighter losses are so high that formations are fading away.

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Moreover, Tempests and Spitfires can now reach the middle of the Reich. Owing to this development, the German fighter arm will suffer reverses from which it can hardly recover unless it succeeds in effectively opposing enemy aims.

The solution to the problem of defending the Reich successfully is to be found, therefore, in counter-measures against the numerical and, in particular, the qualitative superiority of enemy fighter types.

At present the German aim is to gain numerical superiority over enemy fighter escorts in the heart of Germany.

If fighters are heavily concentrated and skilfully directed, a large number of enemy aircraft will doubtless be shot down in the initial engagements. If combat conditions are favourable and flying units up to standard, German losses should be kept within bearable limits.

The enemy may take the following counter-measures:

continuation of attacks using different escort tactics, or

continuation of attacks, avoiding weather conditions which will permit German fighters to be used on a large scale.

In the first instance, the enemy may recognise that large-scale operations by the German fighter arm are limited owing to technical and personnel problems, and that he will turn these operations into a battle of attrition by incessant attacks regardless of losses. The German fighter arm could not maintain this pace indefinitely, as a brief sequence of large-scale operations would soon reduce technical serviceability alone to a state in which the term "large-scale operation" would no longer be justified.

Moreover, the enemy may change his present escort tactics and likewise concentrate his fighter forces, thus quickly achieving equality or superiority.

In view of the above, there appears to be no immediate possibility of changing the air situation over the Reich with the means at our disposal at present.

If, on the other hand, the Luftwaffe can put up sufficient numbers of new superior aircraft, we will deal with enemy fighters as a first step towards bringing about a change in the air situation. The Me 262, a new single-seater fighter, will justify these expectations.

Approaching bomber formations and their fighter screen could be intercepted at the frontier of the Reich, thus forcing fighters to drop their extra fuel tanks and preventing them from escorting the bombers.

In this way the Luftwaffe will regain not only technical, but also moral superiority. The German fighter command will also have more freedom of action, and this will lead to a more effective, widespread and flexible use of forces.

The enemy will be forced to carry out less widespread operations. This applies both to fighter formations, which will have to cease loose formation operations covering practically the whole of Germany and form close, secure groups, as well as to bomber formations, which will also have to close in owing to the contracting escort, thus offering better targets to the German defence forces.

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Presuming that one new fighter can replace 5 earlier types, 20 high-speed fighters would leave 100 of the others free to deal with the bombers. This estimate appears even more favourable in practice, as the moral effect of qualitative superiority can never be expressed in figures. Losses would be greatly reduced if high-speed fighters were used, as owing to their superior speed they are usually vulnerable only when taking off and landing.

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Once air superiority over German territory has been achieved, attacks can then be made on enemy air assembly points and bases. This will cause serious disorder and weakening of effort at the very least. Surprise attacks on bomber groups forming up at assembly points will also force the enemy to protect these points with fighters, which will therefore not be available for escorts or operations at the front.

(c) After the fronts have been withdrawn and the necessity of centralising direction and employment of forces as the area of operations grows smaller has been taken into account, the following proposals might be put forward:

Fighters and A.A. of the Reich defence forces should be united in one Air Defence Corps (formerly 1st Jagdkorps).

Luftgau H.Q.'s should be completely independent of A.A. command. They would be responsible for A.R.P. and administration, and only for supply and ground organisation, where outside the sphere of air defence.

There are 4 to 5 fighter divisions in the Reich for this purpose, and these would use the fighters intheir command areas in compliance with the orders of the Air Defence Corps.

Moreover, the fighter divisions would be fully responsible for their ground organisation, supply questions and communications system.

For this purpose they would each have the following in their staffs:

a senior ground organisation commander,

a senior supply commander, and

a senior signals commander.

These senior commanders would at the same time be troop commanders and and would be at divisional battle headquarters.

In this way central battle headquarters could be set up, and these could take a direct part in conducting operations and supply. Unified command would be guaranteed and forces could be concentrated quickly at any point.

Special arrangements should be made regarding co-operation between fighter divisions and Luftgau H.Q's.

Small signals sections of 4 to 6 men should be set up at all airfields used by fighters, under the command of the Fighter Division. These sections would issue reports and indents from units directly to divisions and the senior commanders concerned. Intermediate posts and the delays caused by them would thus be eliminated and time and energy taken up by various authorities and service channels would be saved.

Operational Gruppen and Geschwader would be saved a great deal of work, as all operational reports and supply, personnel and equipment indents would pass through them directly to the divisions.

A well-organised telecommunications network is necessary and, indeed, already exists.

The number of divisional staffs and the size of Luftgau H.Q.'s would be reduced by this arrangement.

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The number of posts would certainly not increase beyond the strengths of the former staffs - they would probably be reduced.

A.A. defences would be grouped in (reinforced) A.A. divisions, which would co-operate with the fighter divisions concerned under direct command of the Air Defence Corps. An A.A. General with the powers of a corps commander would be at the Air Defence Corps H.Q. He would be in command of all subordinate A.A. units and would in turn be subordinate to the Air Defence Corps commander.

Furthermore, it is suggested that 2 of the 4 Staffeln of every fighter Gruppe be merged into one unit. This would make for economy in personnel without impairing the readiness for action and transferability of a Gruppe.

In the case of the 41 Gruppen operating in the command area of Luftflotte Reich a saving of 328 officers and 3034 NCOs and men of general duty and technical categories would result.

(d) Requirements for active defence:

More extensive day and night fighter operations taking first place over all other requirements.

Priority construction and incessant use of all available modern fighters (jets).

Requirements for passive defence:

Industry, administration and railways must be decentralised at all costs.

Present termini for long-distance, suburban and goods trains must be changed. Marshalling yards must also be decentralised.

Even the smallest installations must be camouflaged.

Railways must be more strongly defended and the tell-tale white steam from locomotives drawn off into condensers.

Ferries must be set up at all important railway and road bridges.

The following requirements in the field of day and night fighter operations are essential factors for a successful air defence:

superior speed and climb,

increased range approaching that of enemy types, and

clear vision, as at such high speeds the pilot who spots his opponent first has the advantage. A heating system which will prevent ice and condensation from forming on fighter cockpits at great heights is also necessary.

The maximum boost altitude must be raised (exhaust gas turbines).

Fighters must be equipped with a navigationsl aid which will enable formations to take off and land even in bad weather conditions.

Fighter control methods must be changed: an effort must be made to produce a device which will show the fighter's position as a point alternating according to movement.

Saferescape devices from these fighters must be introduced (catapult seat).

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/Armament

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Armament must be improved so that the fighter can fire from long range with the prospect of hitting the target whilst remaining outside the effective range of bomber armament.

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Large-calibre armament must have a higher trajectory and a faster rate of fire.

Aircraft must be fitted with as many guns as possible so that the target can be brought under heavy fire quickly.

Guns of larger calibre must be used so that the greatest number of possible successes will be obtained with a few hits. All calibres exceeding 3 cm. come into this category (the rate of fire must also be increased).

Aircraft must be fitted with a gun which will fire a large number of rounds simultaneously.

This would require special sights which would measure range and deflexion and fire automatically.

The jet fighter, which has already proved a success in action, must undergo further development. At present, this is the only aircraft capable of effective action against high-flying American bombers.

Formations of these aircraft must be dispersed and suitable Autobahnen used as runways.

Radar installations must be set up on railways.

In order to avoid the difficulties of finding suitable jet-fighter airfields and of making them less vulnerable to air attacks, the possibility of aircraft using the numerous lakes in Germany for landing and taking off should be examined (appropriate technical development will be necessary).

Effective action could be taken against approaching bomber formations even in the worst weather conditions by using the He 177 fitted with 33 - 21 cm. mortar bombs.

Aerial mine-laying is also thought to have prospects of success against bomber formations.

Requirements for night fighter operations:

Increase of radio aids to improve the detection of the German fighter position for better control of units ("Y" installations).

More extensive jamming to paralyse enemy aircraft R/T and radar over the Reich.

More extensive use of the "Himmelbett" interception apparatus as a precautionary measure in the West.

The use of Me 262 and Do 335 against Mosquito formations. The use of airborne search apparatus and operator in fighters employed over objects and in interception.

Night fighter control equipment to enable aircraft to fly in formation.

Positions of German and enemy aircraft to be shown on a screen thus eliminating the necessity of control from the ground which is subject to jamming.

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/Control

Control transmission equipment which cannot be jammed.

Target approach equipment with continual frequency change as a measure against enemy airborne search apparatus and jamming transmitters.

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Small, light and easily-operated plan position indicator with a range of 50 metres.

Small long and short wave receivers for commentary reports.

Co-ordination of search equipment and armament (blind firing).

Single and twin-engined fighters to be housed in rain-proof and snow-proof shelters.

Introduction of American non-skid tyres.

Aero-engines to be equipped with exhaust gas turbines.

A.H.B.6 Distribution

Same as for Translation VII/90

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