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#### THE COURSE OF THE AIR WAR AGAINST ENGLAND

Two studies prepared by the German Air Historical Branch, (8th Abteilung), and dated 22nd November, 1939, and 7th July, 1944.

TRANSLATED BY:

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20. 5. 1947.

# I. PIANS FOR AIR WARFARE ON ENGLAND (dated 22nd November, 1939)

The possibility of beginning attacks against military and essential industrial targets in Britain has arisen due to the temporary postponement of the offensive in the West.

The aim of these attacks must be to increase the already existing unrest in the country, to hinder the flow of imports, and thus to dislocate the whole enemy supply system. This can best be achieved by carrying out attacks in widely separated areas by day and by night. These operations will usefully supplement those of our Navy, which has already virtually succeeded in paralysing the British East coast ports.

Continuous attacks by small formations must also be effected, so that the enemy will be obliged to keep strong elements of his air defence forces in Britain, and even perhaps to withdraw fighter units already sent to France. If this can be achieved, it will have considerable effect on the outcome of a later offensive against France.

Another advantage would be that by diverting attention from the Western Front, these attacks against Britain would enable us to launch a surprise offensive in the West.

The selection of targets must be governed by the principle that we must avoid giving the impression that Germany is opening unrestricted strategic aerial warfare. For should this appear to be the case, the British would promptly reply by attacks on open towns in Germany, and if the defence of these becomes necessary, the result will be a marked decling in the assistance which the Luftwaffe can give in the event of an offensive being launched.

As long as the possibility exists of an offensive in the West, our air attacks must be on a limited scale, and restricted to attacks on vital military targets. Certain important targets are suggested in Appendix I.

The first priority must be given to attacks on British naval ships and their bases. Such operations will be particularly important at a time when deliveries of supplies from overseas are on the increase.

It is suggested that the attacks should begin by simultaneous operations against new constructions and harbours in the West of England under cover of favourable weather conditions. These will be followed by day and night operations carried out at irregular intervals.

Until the opening of the Western offensive, J.G.27 must be reinforced by elements taken from the Western front, so that the defence of the ports of North Western Germany is secured against enemy counter attacks.

The attacks will be carried out by FLIEGERKORPS X with  $I/K_{\bullet}G_{\bullet}30$ ,  $K_{\bullet}G_{\bullet}26$ ,  $K_{\bullet}G_{\bullet}100$  and  $K_{\bullet}G_{\bullet}4$  (based at WEVER).

#### Groups of Targets.

1. Warships at sea and in port :

in the following order of priority:

Aircraft carriers. Battle cruisers. Battle ships.

- 2. Dockyards in which new warships are built:
  - (a) Tync:
    - 1 Aircraft carrier.
    - 3 Battleships.
    - 6 Cruisers.
    - 4 Destroyers.
    - 50 Fishing vessels being converted to submarine chasers.
  - (b) Clyde:
    - 2 Aircraft carriers.
    - 2 Battleships.
    - 7 Cruiscrs.
    - 14 Destroyers.
    - 3 Submarines.
  - (c) Birkenhead:
    - , - ...
    - 2 Battleships. 2 Cruisers.
    - 2 Destroyers.
    - 3 Submarines.
  - (d) Barrow in Furness:
    - 2 Aircraft carriers.
    - 1 Cruiser.
    - 3 Submarines.
- 3. Harbour installations (Merchant ships in berths, loading and unloading stages):
  - (a) Liverpool:

Large fuel installations.
Refineries.
Second largest milling centre.
Large silo installations.
Cold storage buildings.
Sugar refineries.

(b) Manchester Ship Canal:

Lock installations. Ships in the canal.

(c) Bristol Channel - Avonmouth:

Large fuel installations.
Large mills and silos.
Cold storage buildings.
Oil mills.
Timber stocks.

#### (d) Cardiff:

Large mills.
Silos.
Cold storage buildings.
Special loading and unloading stages.
Main port of reshipment for English coal (export to France).

#### (e) Swansea:

Refineries.
Large fuel installations.
Large mills.
Silos.
Timber stocks.

### 4. Important military target:

Billingham (90% of the British H.E. industry, similar to German leunawerke).

## II. THE COURSE OF THE AIR WAR AGAINST ENGLAND (dated 7th July, 1944)

In the last days of June 1940, France was forced to submit to an Armistice. Six weeks had sufficed to show the French the superiority of German might and weapons and they realised that further battles and resistance were pointless. Germany thus gained one of her greatest successes in the 'War of Independence', by breaking the political and military entents of the Western Powers, which had withstood all opposition in the period after World War I.

The superiority of the German High Command, the ability of German troops and the quality of German materials in all spheres had combined to achieve within the space of a few weeks results which four years of fighting in World War I had failed to bring about. England's Continental sword, France, had left the enemies of the Reich; the airfields on French territory, which the British had constructed for operations against Germany, had been destroyed and the B.E.F. annihilated.

Germany's only remaining enemy was England, an island which had not been seriously threatened since the days of the Spanish Armada, and from whence the British had planned the destruction of Germany. The task of the German High Command in the summer of 1940 was to defeat the enemy's intentions and to reduce him to that very position to which he had planned to bring Germany.

The participation of the Luftwaffe in the quick success of the Army in Poland, Norway and France had been the deciding factor in the battle. The destruction of the enemy Air Forces in the shortest time had created the preliminary conditions for a German victory on all fronts. The significance of the Air Force would be even greater in attacks on England, as only by the use of air power was it possible to attempt to surmount the strategic advantages of England's island position.

This had been clearly recognised from the beginning, as is evident from the planning of air operations against England. In the summer of 1940, the strategic conditions for a German air offensive against England had become very favourable. From Norway in the North to the Bay of Biscay in the South, the entire Western European coastline was at Germany's disposal as a base for operations against the British Isles.

We were no longer restricted by the necessity of respecting the neutrality of other countries, and due to Italy's entry into the war on the side of the Reich, England was forced to employ at least part of her forces to protect her positions in the Mediterranean. At this time, England resembled a sea fortress, surrounded on two sides, while the approaches to the remaining sides were endangered to a large extent by German submarines and aircraft.

German planning and preparations had been adequate: until now, only isolated operations had been carried out against particularly important military targets and against enemy trade routes, and the necessary target material had been supplemented by the work of long range reconnaissance units. But now, - barely two weeks after the conclusion of the Franco-German Armistice, the first directive concerning the "intensive air war against England" was issued by the Operations Staff on 11th July, 1940. Three Luftflotten (Luftflotte 5 from Norway, Luftflotte 2 from Belgium and Holland and Luftflotte 3 from N.W. and W. France) could now join in operations against the British Isles.

On 21st July - Goring held a conference with the Chiefs of the Luftflotten to discuss the necessary preparations.

Up to 25th July - The Luftflotten worked out the first plans for a concentrated attack.

On 29th July - The Operations Staff criticized certain individual points in these plans.

By 1st August - The Luftflotten submitted their plans in a revised form and Göring expressed his views on certain questions.

On 2nd August - The final directive of the Operations Staff for the "Adlerangriff", which aimed at destroying the British Air Force in the same way as the Polish and French Air Forces, could be issued to the Luftflotten.

In this directive the battle areas of the Luftflotten were defined and the exact order in which the individual stages of the operation should be carried out was laid down. As the dead line for the "Adlerangriff" had not yet been given further supplementary orders were necessary.

Once again, on 6th August, Goring called the Chiefs of the Luftflotten together in Karinhall for final discussion, but the date of the commencement was not fixed. Weather conditions appeared to be unfavourable, and the commencement of the attack, finally arranged for early on 10th August, was postponed from day to day and then from hour to hour (from 10th to 11th, from 11th to the morning of 13th, then from the morning of 13th to the afternoon of the same day).

Early on 13th August, however, certain units of Luftflotte 2 took off and Goring's order to return did not reach them. These units therefore carried out their duties in spite of bad weather conditions. Their operations furnished a proof of the performance of German crews and machines even under unfavourable conditions, but dislocated the plan for an attack carried out by the three Luftflotten from their widely separated bases at specified intervals.

In spite of this premature take-off by units of Luftflotte 2, the "Adlerangriff" plan was once more taken up. On the following days - 13th, 14th and 15th August, the C.-in-C. of the Luftwaffe issued further detailed directives to the Luftflotten concerning the destruction of the enemy fighter force and attacks on the ground organisation and the British aircraft industry. As our aims were not achieved in these three to four days, the orders for further attacks on the enemy Air Force had to be repeated at certain intervals. It was not found advantageous to define the operations of the Luftflotten down to the last detail in the framework of an extensive plan; greater initiative had to be left to the Luftflotten in issuing orders.

On 20th August, the C.-in-C. of the Luftwaffe issued a new directive to the Luftflotten, "to continue the fight against the enemy Air Force until further notice, with the aim of weakening the British fighter forces. The enemy is to be forced to use his fighters by means of ceaseless attacks. In addition, the aircraft industry and the ground organisation of the Air Force are to be attacked by means of individual aircraft by night and by day, if weather conditions do not permit the use of complete formations". These operations, carried out with relatively high losses, did not however gain the required success, because German air superiority was not achieved over Southern England.

The original objective of the Operations Staff, the destruction of the Royal Air Force by means of an intensive lightning blow, was to have been carried out in conjunction with the German plan to carry out a large scale landing on the South coast of England with combined forces of the Army, Navy and Air Force. For this reason, over 1,000 individual targets of the enemy Air Force and aircraft industry were attacked by German bombers in August 1940. Great distances were covered by the aircraft to the targets, but due to the ever increasing fighter defences, losses were heavy; in addition, such long flights necessitated a reduction in bomb tonnage, and this fact, coupled with the dispersal of attacks over so wide an area, led to a failure to achieve the damage that had originally been intended.

The course of the first phase of the air war against England was therefore characterised by a large number of individual daylight nuisance raids on enemy Air Force installations, attacks spread over the entire island, heavy losses - the highest proportion during the operations against England - and relatively few bombs were dropped.

The transition to the second phase is marked by the beginning of concentrated large-scale night attacks on important ports, Portsmouth and Liverpool, which were successfully carried out during the last days in August. These attacks were an entirely new departure, both tactically and strategically. The objectives were no longer confined to the Air Force, but were also political and economic.

The idea of a reprisal attack on London first appeared in a preliminary order by the C.-in-C. on 31st August, concerning the conduct of operations in September. To counter and put an end to British terror attacks on German towns and civilians, Hitler, after his last warning on 4th September 1940, ordered concentrated reprisal attacks on London to commence on 7th September. (The British had made a first attack on the German capital on 26th August 1940). In this way, a blow would be struck at the political and economic centre of the British Empire, and at the morale of London's civilian population.

The German orders clearly expressed that the main targets of the attacks were the important military supply installations and production centres; 'terror' attacks, such as are being delivered by the Anglo-Americans on Germany today, were never contemplated. A series of German air attacks on London started on 7th September. Twenty-two large scale day and night attacks followed during this month, supported by individual nuisance raids at all times of the day so as to increase the moral effect, and to ensure that London experienced no respite from the attacks. This 'nerve warfare' carried out on London in October and November 1940 was, by its weight and duration, in excess of any attack on a single city by either the German or any other Air Force in this war.

As a result of the danger of excessive losses, the large scale attacks were switched from day to night. 27 large scale night attacks in October and 12 in November, supported by 253 and 235 nuisance raids respectively by day and night, on the well protected capital represented the climax of flying operations in this war. On 18th October this unique performance was recognised by the Reichsmarschall in an Order of the Day to all flying personnel operating against England. had been obliged to evacuate the important production, supply and administrative centres with most of their population to other areas, and had therefore been confronted with endless difficulties in production, which had had important results both on the strength of his derences against German attacks and on the scale of British attacks on Germany. In addition to these concentrated attacks on a single target, operations against the enemy Air Force were continued in the second phase. smaller forces but carefully picked crews daylight nuisance raids on individual Air Force installations were carried out regularly during this period.

The landing originally planned in Southern England, was not however possible despite these preparatory operations carried out by the Luftwaffe. Weather conditions proved to be more unfavourable than had been anticipated.

The next and third phase may be distinguished from its predecessors by a change in the selection of targets, and by the continued improvements in operational methods. With the transfer of many industries from London to regional areas, it became necessary to attack these new centres of armament and supply production. Thus in mid-November 1940, began a series of heavy attacks on British industrial towns in the Midlands, of which the attack on Coventry has become the best known. Birmingham, Wolverhampton, Manchester, Liverpool, Birkenhead, Southampton, Sheffield, Portsmouth, Bristol, Avonmouth, Cardiff, Plymouth, Swansea, Derby and Hull were also bombed in repeated night attacks throughout the winter months, as often as the difficult weather conditions allowed.

/Attacks

Attacks on London, however, continued, and during the winter of 1940/41, there were 13 large scale night attacks on the supply installations and docks of London. and over a hundred nuisance raids on individual industrial targets. During this phase, the large scale attacks on industrial towns of England were carried out during the full moon period, to facilitate the location of the targets, but those on London could, on account of the great area, be carried out even on dark nights with every prospect of success. About a week before the beginning of each full moon period, the Operations Staff issued a directive to the Luftflotten indicating definite targets to be attacked during the period.

The fourth phase of the air war against England, following on the already successful attacks against industrial targets, began with the more favourable flying weather experienced in March 1941. Of primary importance were the attacks on the vital supply ports, mining operations off the coast, and attacks on enemy shipping, — the aim being to prevent supplies for the reconstruction of destroyed industries from reaching Britain. The large ports were attacked on a heavier scale with similar operational tactics.

The port installations of London were once more subjected to devastating attacks by German bombers. Cardiff, Portsmouth, Liverpool, Birkenhead, Glasgow, Bristol, Avonmouth, Hull, Plymouth, Greenock, Dumbarton, Newcastle, Sunderland and Belfast were heavily attacked from March to May 1941; many wharves were destroyed and the enemy shipping losses rose to an umprecedented level. Luftflotte 5, up to this time engaged on sea reconnaisaance and the protection of our own shipping, also carried out attacks on Scottish ports.

The mining of England's large estuaries was developed as a special task by Fliegerkorps IX. The Thames, Humber and Mersey estuaries were mined regularly and consequently British shipping traffic was dislocated and paralysed despite all the countermeasures adopted. Daylight attacks on industrial targets by selected crews were also continued in this phase; new targets located by reconnaissance, were allotted, and in this way, the harassing of British production was continued. Attacks on British night flying acrodromes, which served as bases for British attacks on the Reich and occupied territory were allotted to Fliegerkorps II as a special task, and these concentrated night and individual day attacks were carried out with great success.

In April and May, on Hitler's orders, came the reprisal raids on London, which were carried out with special forces, and in spite of intensified defences the greatest effects were achieved. (On the night of 16/17th April 681 aircraft dropped 886 tons H.E. and 151 tons incendiary bombs, 19/20th April 712 aircraft dropped 1025 tons H.E. and 152 tons incendiary bombs and 10/11th May 505 aircraft dropped 718 tons H.E. and 86 tons incendiary bombs.

In the Spring of 1941, the weight of our effort led to the fullest use of all forces, and many crews had to make two sorties in the reprisal raids; in the words of Goring, "a supreme effort was made". The results, however, were satisfactory and fully justified these operations. Many armament factories and ports in England were destroyed, and their reconstruction was delayed due to the possibility of further attack.

Up to this time the air war against England was split into four overlapping but distinct phases:

(1) The attack on the Air Force.

2) The siege of London.

(3) Attacks on industrial towns and finally
(4) Attacks on ports and industrial towns, and
on merchant shipping.

Although weather conditions during the winter led to a considerable reduction in attacks, this was counter-balanced on the other hand by an increase in the intensity of individual operations. Homing methods were continually improved, the bomb-load of individual aircraft was increased, target data and assignment were improved, and on the whole the operational efficiency of crews and machines was raised. The orders of the Operations Staff and the Luftflotten were also brought into alignment in order to eliminate ambiguities. The introduction of all these measures for the continuation of the attacks made it appear likely that we should succeed in bringing the enemy to his knees.

At the end of May, however, our forces had to be regrouped because of the preparations for the Eastern campaign. On 22nd May, Luftflotte 3 assumed command of all units remaining in the West, whose strength finally decreased from 44 to 8 bomber Gruppen; the front of Luftflotte 5 turned to the Northern frontier of Norway. Thus began a completely new fifth phase of the air war against England, brought about by these changes.

This phase was characterised by the attacks made at long intervals, and which were on a restricted scale as a result of the operations of the Air Force in the East. The main tasks of the remaining units were to attack the most important port targets and merchant shipping and to mine the river estuaries. The large scale night attacks ceased gradually; if further large scale attacks were ordered, they were reprisal raids for propaganda purposes.

Looking back, one is impressed by the comparison of the German performance at that time and that of the present numerically stronger enemy forces. What would our High Command not achieve with such a powerful Air Force! From this comparison one may draw the conclusion that the decisive factor in this war is not so much the weight of material used, as a High Command who knows how best to use it, and a soldier who risks everything for the survival of his nation.

#### Distribution:

C.A.S. A.M.P. A.C.A.S.(Ops.) A.C.A.S.(I) D.S.D. (12 copies)