# RESTRICTED

REPORTS

AIR

ALLIED

OF

ATTACKS

RESULTING FROM

PHYSICAL DAMAGE

ON GERMANY,

1944

## AIR HISTORICAL BRANCH

Translation No. VII/162

Issued by: AIR MINISTRY, A.H.B.6 February, 1957

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ALLIED AIR ATTACKS ON GERMANY, 1944

This document is a compilation of translations of relevant portions of German material which has become available.

During the period covered attacks were made, more specifically than previously, on German airfields and transport centres. For this reason this document is divided into 3 parts, Part I covering raids on towns and industrial targets, Part II covering raids specifically on airfields and Part III covering raids directed against transport centres.

There are also 3 Appendices to this report. Appendix A, which is self explanatory, gives an overall picture of allied raids on the major towns for the month of December, 1944, and Appendix B and Appendix C are, respectively, Location and Chronological Indices.

It is regretted that information covering the many and heavy raids on the Ruhr is very sparce, due to non-availibility of original source material. The same applies to individual raids on synthetic fuel and hydrogenation plants. It will, however, be noted that "period" reports, where available, have been incorporated.

In some of the reports on raids on Hamburg it will be noted that the location WEDEL occurs in connection with oil installations. There is little doubt that this is an error in the original German and should read VEDDEL. WEDEL is well down the river but not actually on the river bank whereas VEDDEL is in the harbour area between Hamburg and Harburg.

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## ALLIED AIR ATTACKS ON GERMANY - 1944

# PART I - TOWNS

#### ASCHAFFENBURG E. 970 - LGK XIV

AUGSBURG

8a 2341 -

# 21/22 NOVEMBER

Bombs dropped:

(a)

(b)

IGK VII

War Diary

25

Casualties:

FEBRUARY

(USAAF)

25/26 FEBRUARY

Bombs dropped:

Bombs dropped:

Casualties:

(a)

(b)

The raid was carried out in 4 waves each of 10 - 15 aircraft from a height of 3000 metres. The town centre and Schweinheim, where numerous fires were started, and Damm were most affected.

30 mines 300 - 400 H.E. 5 - 7000 incendiary bombs.

30 dead, 200 injured and 800 homeless.

The "Ultra" measuring instruments factory was destroyed and severe damage was inflicted on the Kirch measuring instruments factory, the Gueldner Engine Works and the Aschaffenburg Cellulose Works which were put out of action. The railway warning and telephone systems were destroyed.

Gas, water and electricity supplies were severely damaged and a transformer house destroyed.

About 150 aircraft flew to a rendezvous at Ingolstadt and from there took a southerly course and attacked Augsburg from the east between 1358 and 1430 hours.

700 H.E.

264 dead at the Messerschmitt works (234 of these were from a concentration camp, working at the factory).

Between 2122 and 2206 hours several hundred aircraft penetrated in 4 waves on a very broad front.

150 mines 1300 H.E. 100000 incendiary bombs 40000 phosphorous bombs 1000 oil bombs.

# /Casualties:

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Casualties:

213 dead, 1837 injured, 186 buried and 85000 homeless.

Houses, businesses and public bldgs.:

1250 severely damaged 1135 medium damage 1569 slightly damaged.

2921 destroyed

Of 37 factories hit, MAN suffered 60% and Keller & Knappich 50%.

A number of military installations were hit; including 4 barracks. The Naval Research Institute was also hit. In addition, several Flak and searchlight sites sustained considerable damage.

Several hundred aircraft penetrated on a wide front between Kolmar and Schneeifel from 1049 to 1125 hours. They continued on an easterly course The followto the Augsburg area. ing details concern places in a wide area including Augsburg, Ulm, Friedrichshafen, Bobingen, Weilheim, Schwab-Muenchen, Fuerstenfeldbruck, Aichach, Lahr, Waldshut, Neuburg, Friedberg, Tettnang, Langenargen, Donaueschingen, Konstanz, Ueberlingen, Stochach, Mindelheim and Eichstaett. The Flak expended 11078 rounds of ammunition, of which 6744 rounds were in the defence of Augsburg, and 9 aircraft were shot down. Weather conditions and defences prevented the development of any possibly proposed large scale attack on a given town.

22 mines, 2200 H.E. 1200 incendiary bombs, 2000 phosphorous bombs, 85 oil bombs, 12300 fragmentation bombs (9 kg.)

80 destroyed 92 severley damaged 98 medium damage 423 slightly damaged.

5 major, 32 medium & 36 smaller fires.

235 dead, 410 injured & about 400 homeless.

The No.2 Works of Bemberg A.G. were severely damaged and the Lech Water Works destroyed.

/AUGSBURG

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Fires:

Casualties

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G.3837/DOP/1/57/

AUGSBURG As above <u>16 march</u> (USAAF)

Bombs dropped:

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Houses:

#### - 3 -

AUGSBURG As above

13 APRIL For introductory comments please see report of raid on this date (USAAF) on Schweinfurt. 500 H.E. Bombs dropped: 1000 fragmentation bombs, 10000 incendiary bombs 1000 oil bombs. 13 destroyed Houses: 18 severely damaged 100 medium to slight damage. 40 major, 6 medium and 45 smaller Fires: fires. 64 dead (51 inmates of a concen-Casualties: tration camp, employed by Messerschmitt). 161 injured (107 do.) Messerschmitt A.G. was severely damaged. 1/2 JANUARY The air raid warning lasted from 0256 to 0345 hours and the attack was directed mainly on the south and southeast sectors of the City. 30 mines, 200 H.E. 10000 incendiary bombs 500 phosphorous bombs. 21 destroyed

28 severely damaged 66 medium damage 360 slightly damaged.

79 dead and 117 injured.

One industrial concern was destroyed and two damaged and five military installations were damaged. Targets included:

OKH, Bendlerstrasse; Central Post Office; Exhibition Halls of the Fair, Charlottenburg; Tempelhof Goods Station; a searchlight battery, Wupperstrasse; Flak battery, Lichterfelde South Station and a gasometer in Neukoelln.

# /BERLIN

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G.3837/DOP/1/57/

BERLIN E.1679 - Chief, Orpo. E.1322 - Min. of Pub. Inf. & Prop.

Bombs dropped:

Houses:

Casualties:

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#### 2/3 JANUARY

From about 0050 hours until 0550 hours strong penetrations took place from Holland to Central Germany with the main attack on Berlin. Of the strong formations, about 300 aircraft, some 50 - 70 flew over the Capital and from a cloudy sky and in slight rain dropped their bombs, The chief target area was the east and southeastern sectors of the City. The alarm lasted from 0159 to 0321 hours.

Bombs dropped:

60 mines

350 H.E.

severely)

141 destroyed

1500 phosphorous bombs 20000 incendiary bombs

435 severely damaged 106 medium damage 1018 slightly damaged.

and 5000 homeless.

Houses:

Casualties:

BERLIN E.1322 - Min. of Pub.

Inf. & Prop.

#### 20/21 JANUARY

From 1705 to 2030 hours some 400 -500 aircraft penetrated over the North Sea and Holland on an easterly and southeasterly course. In all about 20 are reported to have been shot down. In Berlin the alert was sounded at 1856 hours and the all clear at 2025 hours. A medium attack was launched by about 200 - 250 aircraft, of which 10 were shot down over Berlin.

77 dead, 215 injured, 85 missing

One industrial concern was destroyed and 12 damaged (8

#### Bombs dropped:

Houses:

Casualties

650 H.E. 4500 phosphorous bombs 120000 incendiary bombs

60 mines

463 destroyed 657 severely damaged 364 medium damage 1800 slightly damaged.

243 dead, 465 injured, 40 missing and 10000 homeless.

/Industrial

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# G.3837/DOP/1/57

BERLIN As above

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Industrial

5 destroyed 10 severely damaged 17 medium damage 14 slightly damaged.

The following were among the more important targets hit:

Accumulator Works, Oberschoeneweide; Buessing-NAG, Oberschoeneweide; AEG, Treptow; Siemens Plania, Lichtenberg; Siemens Apparate-Maschinen, Lichtenberg; Bewag Transformer Works, Lichtenberg; Water Works, Wuhlheide; Schlesischer Goods Station; Graetz A.G., Treptow.

The districts of Koepenick, Oberschoeneweide and Lichtenberg were without electric power.

The tramway, Underground, and Suburban railway systems were dislocated, particularly in the east sectors. The permanent way on the line to Hamburg was destroyed.

In Mark Brandenburg 45 places were attacked on which 6 mines, 77 H.E., 375 phosphorous and 5000 incendiary bombs were dropped. Casualties amounted to 13 dead and 34 injured and damage to property, including houses, businesses and industrial properties, shows 51 destroyed, 37 severely damaged and 716 slightly damaged.

#### BERLIN As above

#### 27/28 JANUARY

About 200 - 250 aircraft carried out this raid in cloudy conditions. The districts mainly affected were the southeast and east of the City. The alert lasted from 1958 to 2120 hours. Two raiders were shot down over Berlin.

Bombs dropped:

Casualties:

1000 mines and H.E. 20,000 phosphorous bombs 250000 incendiary bombs 200 oil bombs.

90 dead, 292 injured and 200000 homeless.

Railway communications, both local and long-distance, were severely interrupted. Considerable destruction was

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#### BERLIN

#### As above

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30/31

JANUARY

Bombs dropped;

#### Casualties:

caused to the whole tramway network except in the northeast of the city.

Of 6 gas works hit, 3 had to close down and Neukeolln was without gas. The electricity works were not hit.

Other targets hit included: The Air Ministry (Kreuzhaus); Ministry of Economics (Neue Koenigstrasse); Ministry of the Interior and a number of Embassies. Also a number of police, army and air force barracks and installations were hit.

Industrial targets included:

Jachmer Machine Works; AEG; Goerz A.G; Lorenz; Telefunken; Osram; Agfa; Zeiss-Ikon; Siemens; Deutsche Waffen & Munition; Pintsch; Riedel de-Haen; Mauser; Daimler-Benz; Bavarian Nitrogen Works.

This raid which took place during the early evening of 30 January (Alarm 1957 hours - All Clear 2115 hours) was heavier than that Some 600 of the previous night. aircraft flew over the City in rainy weather and dropped an extraordinarily large number of bombs of all kinds. The formation rendez-voused to the northwest of the City and attacked in 2 waves in a southeasterly direction. The main weight fell on the districts of Charlottenburg, Tiergarten, Wilmersdorf, Schoeneberg and Kreuzberg. Seven aircraft were shot down over Berlin.

2000 mines and H.E. 60000 phosphorous bombs 4 - 500000 incendiary bombs 300 oil bombs.

102 dead, 531 injured and 20000 homeless.

All long-distance railway lines except that to Dresden were closed. The suburban railway, Underground and tramway systems were similarly dislocated.

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G.3837/DOP/1/57

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The West Power Station was put out of action. Through countless water main bursts and damage to the Water Works in Siemensstadt difficulties arose in the supply of water which had a very adverse effect on supplies for fire fighting.

In Siemensstadt 5 Siemens works were hit. In addition Lorenz A.G., Tempelhof; Rhein-Metall-Borsig, Tegel; Askania, Steglitz; Alkett, Borsigwalde (administrative building); Riedel de-Haen, Britz; a number of town halls, government buildings, police and army buildings and installations were hit besides several public service installations.

This was the only raid on the City in the month of April. It was made by 800 aircraft with a fighter escort of 700. The City centre and the southern suburbs of Zehlendorf and Steglitz were mainly affected when 1000 H.E. bombs were dropped between 1041 and 1150 hours. Of 1808 buildings damaged 294 were destroyed. Casualties amounted to 335 dead, 710 injured and 13700 were rendered homeless.

The City centre and the northwest of the City was attacked by 500 aircraft from 1034 until 1144 hours.

1100 H.E. 55000 incendiary bombs 12 oil bombs

Of 2231 buildings damaged 282 were destroyed and casualties amounted to 380 dead, 592 injured and 17500 home-less.

Some 250 - 300 aircraft carried out a raid in cloudy weather from 1038 to 1136 hours with focal point the City centre, Pankow and Wedding. The approach flight followed a course via Osnabrueck, Hanover, Salzwedel and Perleberg.

1600 H.E. bombs 40000 incendiary bombs 1100 oil bombs.

/Casualties

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BERLIN 8a 2671 - Unknown

8a - 2671 - Unknown

BERLIN

<u>.</u>

<u>BERLIN</u> 8a 2671 - Unknown 8 MAY (USAAF)

Bombs dropped:

MAY

(USAAF)

Bombs dropped:

29 APRIL

(USAAF)

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	Casualties: Buildings:	253 dead, 429 injured and 26385 homeless. 2223 buildings were hit of which 425 were destroyed.
<u>BERLIN</u> 8a 2671 - Unknown	<u>19 may</u> (USAAF)	In cloudy weather about 400 air- craft in 5 waves carried out a raid on the City centre.
• • * • • • • • • • •		The approach flight was made on two distinct courses, one via Osnabrueck - Nienburg - Hanover - Peine - Elbe - and one via Helgoland - Husum - Schleswig - Perleberg - Neuruppin. Prior to the arrival of the bomber formations strong fighter forces
	Bombs dropped:	met over the City. 1200 H.E. 50000 incendiary bombs 10000 oil bombs
	Buildings:	393 destroyed and 2124 damaged.
	Casualties:	171 dead, 440 injured and 28000 homeless.
<u>BERLIN</u> 8a 2671 - Defence of Reich, OPS.	<u>24 may</u> (usaaf)	Between 1058 and 1128 hours in cloud- less weather about 600 aircraft carried out a heavy terror raid from a height of 7 - 8000 metres in 4 waves. The areas mainly affected were the City centre, Prenzlauer Berg, Horst-Wessel and Siemensstadt. The approach was made over Schleswig- Holstein and Mecklenburg.
	Bombs dropped: Buildings:	2500 H.E. 70000 incendiary bombs 10000 oil bombs. 596 destroyed and 3280 damaged.
	Casualties:	182 dead, 597 injured and 33000 homeless.
<u>BERLIN</u> 8a 2671 - Defence of Reich Ops.	<u>21 JUNE</u> (USAAF)	About 700 Fortresses and Liberators with strong fighter protection attacked from 1003 to 1038 hours from a height of 7 - 7800 metres. In defence 134 aircraft were engaged of which 121 made contact. Their losses consisted of 10 destroyed, 1 missing and 19 damaged with 19

/killed

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killed, 4 missing and 14 injured. They claimed 25 certainties and 6 probables and the Flak claimed to have shot down 20 aircraft.

The centre of the raid was the City centre, Kreuzberg, Horst-Wessel and Prenzlauer Berg.

Bombs dropped:

250000 incendiary bombs 10000 oil bombs

9000 H.E.

988 destroyed and 3093 damaged.

474 dead, 756 injured and 28000 homeless.

BIELEFELD E.2615 - Police E.2612 - Police

8

<u>30 SEPTEMBER</u> (USAAF)

Houses:

Casualties:

Bombs dropped:

Fires:

Houses:

Casualties:

MARCH

(USAAF

This raid took place between 1410 and 1430 hours

1280 H.E. (72 duds) 14012 incendiary bombs Of these, 496 H.E. fell on residential districts and 558 in open country. 9617 incendiary bombs fell on residential districts and 2200 in open country.

163 major, 142 medium and 108 smaller fires.

328 destroyed

239 severely damaged

167 medium damage

569 slightly damaged.

345 dead (including 73 foreigners) 219 injured ( " 40 " )

The garages at the military transport park were destroyed as well as the military rations office. The Luftwaffe Clothing office sustained damage. Only slight damage was done to railway buildings and installations but the tramway system was brought to a standstill.

In the textile industry 8 firms were destroyed and 9 others were damaged.

The raid took place through thick cloud between 1202 and 1210 hours from the NW. to the SE. by about 60 - 80 aircraft flying at about 4 - 5000 metres. The southern, southwestern and northern parts of the town and the Old Town were most affected.

/Bombs

G.3837/DOP/1/57/

1014 - Chief ARP

Warden

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151 H.E. (7 duds) Bombs dropped: 915 oil bombs (80 duds) 45 destroyed Houses: 43 severelydamaged 43 medium damage 450 slightly damaged.

> 10 major, 14 medium and 186 smaller fires.

> > 23 dead, 69 injured and 590 homeless.

Damage was caused to railway buildings and installations and permanent way at: the Central Station, Goods Station and the Eller Station of the Cologne-Bonn railway, where the Rheinpreussen fuel store was set on fire. The Gas and Electricity works which were hit by 55 incendiary bombs suffered medium damage, causing. slight fall in production. The Hermann-Goering Flak Barracks at the Venusberg were hit by a large number of H.E., causing considerable destruction in the complex. Among public buildings affected were the Town Hall and the University main building and several hospitals and churches.

This raid, aimed specifically against the Opel works, lasted only 6 minutes from 1242 hours. About 65 aircraft made the attack and all bombs dropped hit the The following bombs works. dropped destroyed 35580 sq. metres of floor space out of a total area of about 87000 sq. metres;

 $350 \text{ H}_{\bullet}\text{E}_{\bullet}$  bombs (500 kg = 175000 kg) 140 incendiary bombs (30 kg = 4200 kg) Total weight = 179200 kg.

Two raids are reported in German documents as having taken place on 24 June. The first (details are prefixed with (a)) was a R.A.F. raid from 0119 to 0130 hours made by 10 - 15 aircraft and the second (prefixed with (b)) by USAAF.

/(a)

# (a) 23/24 JUNE

# (b)<u>24 JUNE</u>

BREMEN E.2910 - Pol. Pres. 8a2671 - Defence of Reich, Ops. E.2624 - Harbour Pol. E.2600 do.

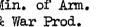
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G.3837/DOP/1/57

BRANDENBURG E.2606 - Min. of Arm. & War Prod.

AUGUST

Fires:



Casualties:

- 11 -

- (a) Most of the damage is described as slight, particularly to industrial concerns. Garage accommodation on railway property was partially destroyed and several railway buses were buried under the debris. Slight damage was also caused to police and military installations.
- (b) About 400 bombers with fighter escort made a heavy terror raid between 1250 and 1325 hours, the first bombs falling at 1253 hours. The bulk of the bombs fell to the west of the town and were evidently intended in particular for the firm Weserflug. Another attack was aimed at the Water Works.
- Bombs dropped: (a) 6 mines, 70 H.E. (7 duds or D.A.) & 2 oil bombs.
  - (b) 3351 H.E. bombs (54 duds or D.A.)

(a)	99	(b)	108 destroyed
	79		228 severely damaged
	395		82 medium damage
	669		750 slightly damaged
	4526		873 glass only.

- (a) 2 major and 1 medium fires.
- (b) 4 major, 3 medium and 8 smaller fires.
- (a) 115 dead, 478 injured, 4 missing and 1030 homeless.
- (b) 62 dead, 79 injured, 5 missing and 1710 homeless.
- (a) At the Weserflugzeugbau a number of shops were severely damaged and 100% loss of production and the works as almost a total loss is reported.

Some heavy and medium damage was also caused to the Deschimag Works and about 100 bombs fell on the Water Works, causing severe damage. A number of filters and water containers, a machine house and workshops were destroyed. Threequarters of normal supply were available after about 3 weeks.

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Houses:

Fires:

Casualties:

- 12 -

The boiler house and coking plant of the Norddeutsche Foundry, which was hit by 85 H.E., were severely damaged and Nos. I & II blast furnaces were put out of action.

A number of small craft in the harbour were sunk and damaged. Attacks were also made on oil treatment industrial plants and tank installation. Severe damage was also caused to railway lines and installations in the harbour area.

The raid lasted 19 minutes from 1006 to 1025 hours when about 350 bombers with fighter escort carried out a heavy attack on the harbour area. Residential districts on either side were seriously affected.

1 mine 4388 H.E. (280 duds or D.A.) 117 oil bombs (2 duds) 8200 incendiary bombs (55 duds) 50 incendiary leaves.

516 destroyed 292 severely damaged 502 medium damage 2333 slightly damaged 1117 glass only.

63 large, 151 medium and 283 smaller fires.

167 dead, 163 injured and 2967 homeless.

Several buildings of Deschimag A.G. were destroyed including the shipbuilding shed and old rigging loft, the painter's shop, No.II coppersmith's workshop, castings pattern shop and a laboratory. A large number of other buildings were damaged to varying degrees.

At the Vacuum Oil Co. a tank with 1500 cubic metres of asphalt was destroyed, as well as a large number of casks. A number of water, oil and steam pipe lines were also destroyed. Despatch of oil could only take place in tank trucks and not in casks.

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BREMEN 29 JULY E.2910 - Pol. Pres. (USAAF) FD.4372/45 I.G. Farben Damage Returns

Bombs dropped:

Houses:

Fires:

Casualties:

- 13 -

The upper floor of the press shop of the Bremen Besigheimer Oil Works was destroyed as well as an empty silo and a number of other buildings. The purification plant at No. II Pumping station was destroyed and there were several instances of fractures to gas and water mains in the harbour area and in the western suburbs of the town. Two U-boats were sunk and one severely damaged and a torpedo boat and destroyer sunk. Damage was also done to a number of other vessels.

The I.G. Farben Oxygen plant also sustained severe damage from 13 H.E.(1 dud), 2 phosphorous and 45 incendiary bombs. A report dated 7.8. states that it was not possible to assess date of resumption or to what extent production would be resumed.

A terror raid was carried out by some 500 aircraft from 2356 hours which affected particularly the inner town, residential districts in the north sector and the harbour During 25 minutes thousands area. of incendiary and phosphorous bombs The fires started were dropped. caused a fire storm so that the damage could only be assessed hours after the raid. Immediately after the first bombs fell electricity supplies for light and telephones failed.

Bombs dropped:

Houses:

Fires:

Casualties:

18/19 AUGUST

68 mines 2323 H.E. bombs (8 duds or D.A.) 108000 incendiary bombs 10800 phosphorous bombs (157 duds) 34 oil bombs (3 duds) 10 marker bombs and flares (1 dud)

8248 destroyed 611 severely damaged 865 medium damage 2327 slightly damaged.

3085 major, 2255 medium and 704 smaller fires. There were no area fires.

1062 dead, 749 injured and 49100 homeless.

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BREMEN E.2910 - Pol. Pres. E.2616 - Harbour Pol.

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G.3837/DOP/1/57

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In a report of the Bremer Lagerhaus Gesellschaft it is stated that this raid brought very severe destruction to the harbour area. Nearly all the timber stores were destroyed and as most of the jetties were destroyed shipping could not be handled for some time. The Europa harbour was completely destroyed together with 27 electric cranes and their tracks. Some 20 vessels of various kinds were either sunk, burnt out or more or less damaged. Considerable damage was also done to sheds and harbour installations in the Overseas harbour. Two floating cranes and some other vessels were sunk and others were burnt out.

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At the Atlas Works several workshops and buildings suffered severe damage resulting in a production loss of about 30%. Several buildings, including the laboratory, all workshops, the office building and garages at the Mineral Oil Refinery were destroyed. About 30 filling and 12 storage tanks were destroyed. A production loss of 70% for an indefinite period is reported.

At the gas works 2 gasometers were burnt out. A transformer station was destroyed. Locomotive sheds at the Central Station were burnt out and several Three engines destroyed. loaded goods trains were burnt The Central Station itself out. was also severely damaged. Damage to railway installations and rolling stock in the harbour area was considerable, where 4 shunting engines were severely damaged and 3 signals boxes were destroyed and 450 goods trucks were burnt out. A large number of army properties were also affected although the damage was in the main comparatively slight.

This raid was made by about 500 bombers from 1535 hours until the all clear at 1640 hours.

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30 AUGUST

(USAAF)

BREMEN E.2910 - Pol.Pres.

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It is claimed that accurate Flak and effective smoke screens resulted in the bombers without exception unloading their bombs prematurely so that the main industrial target such as the Deutsche Vacuum Oil, Deschimag, Weserflug and railway installations remained intact.

Bombs dropped:

Houses:

Fires:

Casualties:

3 mines 873 H.E. (36 D.A. or duds) 500 incendiary bombs 1624 oil bombs (80 duds) 2 phosphorous bombs (1 dud)

441 destroyed 504 severely damaged 372 medium damage 1352 slightly damaged 1592 glass only

11 major, 145 medium and 103 smaller fires.

34 dead, 89 injured and 3388 homeless.

Focke-Wulf in Hemelingen was hit by 1 mine and 11 H.E. bombs, of which 5 fell on railway property. In addition 10 oil bombs were recorded. Only 2 accommodation huts were destroyed, 3 buildings severely damaged and 1 slightly.

Slight damage was also done to the Borgwardworks at Sebaldsbrueck. The railway repair works at Sebaldsbrueck suffered medium damage causing 50% loss in production for 7 days. The stations at Hemelingen and Sebaldsbrueck were hit causing medium to slight damage.

BREMEN E.2910 - Pol.Pres.

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26 SEPTEMBER (USAAF)

The number of attacking aircraft in this heavy terror raid is given as some 400 bombers as well as fighter protection. The first bombs were dropped at 1630 hours.

Bombs dropped:

Houses

1 mine 1732 H.E. (36 duds or D.A.) 57363 incendiary bombs (800 duds) 356 phosphorous bombs 50 oil bombs

1037 destroyed 450 severely damaged 395 medium damage 1195 slightly damaged 1066 glass only.

/Fires:

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Fires:

Casualties:

144 major, 171 medium and 351 smaller fires.

144 dead, 93 injured, 31 unrecovered and 7871 homeless.

At the Sebaldsbrueck works of Borgward 4 workshops sustained severe damage reducing production by 100% for some weeks and the timber stores were nearly all destroyed. At the Hastedt works severe damage was done to buildings and machinery causing a 5 day's loss of production of 70%.

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The Focke-Wulf aircraft factories at Hemelingen the airport and Hastedt also suffered damage to buildings and machinery varying from severe to slight.

The Bremer Silberwarenfabrik where part of the fighter production program was being carried out was completely Production at the railway destroyed. repair of works at Sebaldsbrueck was cut by 100% for 5 days, after that by 50% until further notice. A number of military properties were also damaged and 3 ammunition huts were burnt out.

E.2910 - Pol.Pres.

BREMEN

The town centre and districts round the station and western and southern suburbs were mainly hit in this heavy terror raid by 250 aircraft which started bombing at 2018 hours. The All Clear was sounded at 2110 hours.

Bombs dropped:

6/7 OCTOBER

20 mines 613 H.E. (23 duds or D.A.) 376000 incendiary bombs (100 duds) 30085 oil bombs.

Fires:

Houses:

196 major, 1512 medium and 622 smaller fires.

4387 destroyed 473 severely damaged 785 medium damage 1837 slightly damaged 1337 glass only.

Nearly 100 businesses were destroyed including several hotels, restaurants, department stores and coal depots. Many more were damaged to a greater or lesser degree.

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Of the public buildings including schools, churches, post offices, hospitals and government offices about 40 were destroyed and about another 40 suffered damage. The Deschimag Works also suffered widespread damage, though mostly of a slight nature.

Daimler-Benz suffered medium damage causing a 50% cut in production for 8 days.

The Siemens-Schuckert works were destroyed. Two electricity works installations were severely damaged and one gasometer was burnt out.

A number of railway premises were burnt out or otherwise damaged and although a large number of vessels in the harbour were hit very few sustained more than medium to slight damage. Also a number of military and police buildings and installations were some destroyed and some damaged.

BREMEN E.2910 - Pol. Pres. 12 OCTOBER (USAAF)

The industrial district in Hastedt, Hemelingen and Sebaldsbrueck and the adjacent residential quarters were the targets of this heavy raid by about 250 aircraft. The alarm lasted from 1130 hours to 1150 hours and the first bombs fell at 1135 hours.

Bombs dropped:

Houses:

Fires:

110000 incendiary bombs (2000 duds) 150 oil bombs

588 H.E. (62 duds or D.A.)

743 destroyed 267 severely damaged 349 medium damage 800 slightly damaged.

25 major, 256 medium and 200 smaller fires.

Casualties: 83 dead, 24 injured and 8000 homeless.

Both Borgward works at Sebaldsbrueck and Hastedt were seriously affected. The Sebaldsbrueck works was hit by 100 H.E. bombs which severely damaged all buildings and machines, which resulted in a 100% cut in production for an indefinite period. Nearly all buildings at the Hastedt works were severely damaged or destroyed by 30 H.E. and several thousand

/incendiary

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incendiary bombs, resulting in the same cut in production. The Lloyd Dynamo Works were hit by 5 H.E. and many incendiary bombs which did severe damage. Production cuts amounted to 100% for a short time due to lack of gas and electricity and then 70% for some weeks. The Hastedt Fock-Wulf works also suffered severe damage from 5 H.E. and several thousand incendiary bombs which caused a 90% cut for 3 weeks. Only slight damage was inflicted on the Hemelingen works. The Hanseatische Silberwarenfabrik suffered considerable damage from 1 H.E. and several hundred incendiary bombs. The machine shop was very severely damaged and the office building, except for a few rooms downstairs, and the upper rooms of the factory were burnt out. The cut in production was estimated at 100% for 3 months.

BRUNSWICK E.1322 - Min. of Pub. Inf. & Prop. E. 855 - Railway ARP. 14/15 JANUARY

German documents confirm that this was a scattered raid. Several Luftgaue were affected but none seriously. Wolfenbuettel is reported as most affected where "a fairly large number of H.E. and incendiary bombs were dropped, causing 30 fires, 15 fatal casualties and several houses destroyed rendering about 200 people homeless". About 30 aircraft were shot down out of 350 which penetrated in 4 waves.

BRUNSWICK

CD. 1283 - Works ARP Niedersachsen

<u>30 JANUARY</u> (USAAF)

The report of this raid is placed under the heading of Brunswick as that town is snown as the target in the USVIII Bomber Command Diary of Operations, although, as will be seen from the translation of a German document, the raid covered a much wider area. The following is a translation of the salient features of a report dated 2 February.

"On 30.1.44. from 1141 hours strong enemy formations penetrated the region from the Sulingen-Minden area. The Towns of Hanover, Brunswick, Watenstedt-Salzgitter and the country districts of Brunswick-Wolfenbuettel and Hildesheim-Marienburg were the chief targets.

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/Reports

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Reports to date give the following bombs dropped:

1760 H.E. (263 duds) 2 mines

- 24700 incendiary bombs (4000 duds) 200 oil bombs (50 duds)
- 2632 phosphorous bombs (223 duds) 70 phosphorous drums.

In addition a large number of bombs were dropped on country communities. Damage ascertained up till now includes:

Houses: 130 destroyed 190 severely damaged 50 medium damage 643 slightly damaged

- Industrial: 5 severely & 3 slightly damaged.
- Casualties: 116 dead, 118 injured, 44 still under debris and 5134 homeless."

The report then goes on to give details by locations, of which the following are the more important.

- Hanover: 200 H.E. (30 duds) 10000 incendiary bombs, 3 industrial works severely and 3 slightly damaged. 10 large, 17 medium and 9 smaller fires. 25 dead, 84 injured & 4000 homeless. 80,0 loss in production for 3 days in the mixing works of the Continental Rubber Co.
  - (Note : In a previous report considerable damage is referred to in the mixing room, causing at least 12 mixing rollers and 2 kneading machines to be put out of action.)

Brunswick: 201 H.E. (52 duds) 900 incendiary bombs 141 oil bombs (25 duds) 2 industrial works severely damaged. 3 large, 14 medium and 45 smaller fires. 4 dead, 14 injured and 1030 homeless.

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BRUNSWICK CD.1283 - Works ARP Niedersachsen	<u>10 FEBRUARY</u> (USAAF)	The alarm lasted from 1104 to 1234 hours when strong formations penetrated the area.
	Bombs dropped:	800 H.E. (116 duds) 6807 incendiary bombs (58 duds) 208 oil bombs (22 duds)
	Fires:	77 major, 100 medium and 200 smaller fires.
	Houses:	258 destroyed 308 severely damaged 311 medium damage 1243 slightly damaged.
	Casualties:	191 dead, 159 injured, 26 under debris, 18 missing and 5336 homeless.
		In all 16 firms were hit, including the Luther Works Nos. I and IV, the Eisenbuettel Chemical factory and Buessing-NAG.
BRUNSWICK As above	1 <u>5 march</u> (USAAF)	This raid which covered a fairly wide area was mainly aimed at the Hermann-Goering Works at Watenstedt- Salzgitter, about 20 km. S.E. of Brunswick. It is referred to as a medium heavy raid.
	Bombs dropped:	1984 H.E. (58 duds) 15470 incendiary bombs 67 phosphorous bombs 4802 oil bombs (169 duds)
	Fires:	28 major, 52 medium and 86 smaller fires.
	Houses:	80 destroyed 77 severely damaged 39 medium damage 135 slightly damaged.
	Casualties:	40 dead, 62 injured and 2300 homeless.
		Of the number of bombs dropped the following quantities fell on Watenstedt- Salzgitter:
	•	1106 H.E. (7 duds) 10000 incendiary bombs 1066 oil bombs (40 duds)
· · ·		According to documents available only medium to slight damage appears to have been caused and could be repaired within a few hours or days at most.

G.3837/DOP/1/57/

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BRUNSWICK As above

22/23 APRIL

Between 0150 and 0225 hours some 250 aircraft raided the southeast, central and parts of the east suburbs of the town.

Bombs dropped:

10 mines 700 H.E. 15000 oil bombs (new type with parachute).

Details of damage to houses and casualties are lacking. Concerning damage to industry the following details are given:

Large fires were started in the United Railway Signals Works. The office building, the whole of the worker's camp and some workshops were put out of action. Production ceased in some departments for 3 weeks.

Several fires were started by oil bombs in the Heavy Vehicle works of Buessing NAG and the transformer station was damaged. A number of other firms were hit and damaged but little or no drop in production ensued.

This was a secondary target, the primary one being Dortmund. The raid was carried out by about 200 aircraft at between 5000 and 6000 metres from 0118 to 0140 hours. After initial losses the force which had been in close formation loosened up and this evidently prevented a concentric attack from taking place. In defence 134 aircraft were put up and they claimed 13 shot down and 4 probables. Industrial concerns affected included 2 severely damaged and 2 more sustained medium damage.

BRUNSWICK

CD.1283 - Works ARP,

Niedersachsen.

14/15 OCTOBER

22/23 MAY

This raid took place between 0221 and 0247 hours. In the main the inner and the N.E. of the town were most affected.

Bombs dropped:

20 mines 650 H.E. (30 duds) 200000 incendiary bombs 1000 oil bombs 10000 jet incendiary bombs

/Casualties

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BRUNSWICK

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Casualties are reported as comparatively slight.

The administrative department as well as the design office and stores of Buessing-NAG were severely damaged by fire.

A number of food canning firms suffered a total loss.

The Daimler-Benz works suffered considerable damage by fire. Very severe damage by fire was also caused to Clemens Wagner, makers of uniforms.

Large fires were started at a firm carrying out aircraft repair work, severely damaging the joiners' and mechanical workshops. Damage was also done to the Gas, Electricity and Water Works, though repairs were speedily effected and supplies were again available on 16 October.

#### 20/21 APRIL

The alarm was sounded at 0149 hours and from 0201 hours until 0225 hours the town area was attacked by about 400 aircraft. The parts most affected were the Inner Town and the West and Northwest suburbs.

Bombs dropped: 158 mines (2 duds) 1363 H.E. (99 duds) 130000 incendiary bombs 20000 phosphorous bombs.

> 1861 destroyed 3975 severely damaged 19713 slightly damaged.

Fires:

Houses:

160 major, 680 medium and 450 smaller fires.

Casualties: 664 dead, 1067 injured and 25000 homeless.

A number of railway buildings and installations including rolling stock and permanent way were destroyed or damaged. Five military installations were hit, three being destroyed and two slightly damaged. About 200 industrial concerns were destroyed or damaged, including the Deutz and Poll works of Kloechner-Humboldt-Deutz, Lindner A.G., Heinrich Lanz A.G., and Siemens-Schuckert works.

# G.3837/DOP/1/57/

COLOGNE

A.399 - Pol. Pres.

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/COLOGNE

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COLOGNE E.1323 - Pol.Pres. 15 OCTOBER (USAAF)

Houses:

Fires:

Casualties:

The public warning was given at 0848 hours until 1053 hours. During this period the town area was visited by 1000 aircraft which bombed uninterruptedly from 0859 to 1004 hours.

Bombs dropped: 2 mines 3500 H.E. (195 duds) 10000 incendiary bombs 360 phosphorous bombs

> 717 destroyed 389 severely damaged 206 medium damage 1347 slightly damaged

38 major, 347 medium and 444 smaller fires.

302 dead, 210 injured and 11789 homeless.

The Chief Customs Office and shed were destroyed and 1 ship sunk in the harbour area.

The Flak barracks at Delbrueck were among the 4 military installations hit. The Meulheim station was destroyed and severe damage done to the shunting station at Eifeltor and also to the Central Station. Of 28 industrial concerns affected 9 were destroyed including Imbert Generators. The chemical factory in Kalk and the metal casting firm of Lenze were severely damaged.

Between 1540 and 1653 hours about 800 -1000 aircraft were over the city and dropped their bombs from 1542 to 1626

COLOGNE As above

28 OCTOBER

Bombs dropped:

105 mines 3200 H.E. (96 duds) 120000 incendiary bombs 435 phosphorous bombs.

hours.

2239 destroyed 613 severely damaged 485 medium damage 2185 slightly damaged.

Fires:

Houses:

Casualties:

71 major, 420 medium and 443 smaller fires.

456 dead, 275 injured, 87 missing and 8565 homeless.

/Eleven

#### G.3837/DOP/1/57/

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Eleven railway buildings etc. were hit including the Deutz goods station which was destroyed and the Deutz passenger station which was severely damaged. The line to Duesseldorf was also Of 38 industrial severely damaged. concerns hit 15 were destroyed and 18 severely damaged. They included the Tropon Chemical works damaged, Kloechner-Humboldt-Deutz A.G., West-Waggon, Chemical Factory, Kalk, and Kloechner-Humboldt-Deutz P-Works destroyed. The Kalk works of Kloeckner-Humboldt-Duetz was severely damaged.

Three police buildings were destroyed and 13 damaged and damage was also done to 7 water mains and 5 electricity cables. The transformer at Holweide and the electricity works in Zugweg were badly hit.

30/31 OCTOBER

Again about 1000 aircraft raided the city. The alarm lasted from 2035 to 2218 hours and bombs were dropped uninterruptedly from 2055 to 2125 hours.

Bombs dropped:

170 mines (1 dud) 4000 H.E. (105 duds) 200000 incendiary bombs 635 phosphorous bombs.

5 major, 1281 medium and 1246 smaller fires.

Houses:

Casualties:

Fires:

800 severely damaged 1000 medium damage 1500 slightly damaged.

1200 destroyed

497 dead, 203 injured, 57 unrecovered and 26000 homeless.

Three official buildings were hit including the police court which was severely damaged and the local Party office which was destroyed. The Army Kommandantura was also destroyed. Damage to railway buildings etc. included the destruction of a number of suburban stations.

Industry suffered 14 concerns destroyed and 11 severely damaged. Among those destroyed was the Rhein. Rolling Machine Factory and a metal works and a gas works was badly damaged.

/COLOGNE

## RESTRICTED

COLOGNE

As above

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COLOGNE As above 31 <u>OCTOBER/</u> 1 NOVEMBER From 2100 hours about 500 aircraft dropped their bombs until 2125 hours. The alert lasted from 2045 to 2152 hours.

> 38 mines 2000 H.E. (34 duds) 80000 incendiary bombs.

> > fires.

homeless.

14 mines

84 destroyed

355 H.E. (16 duds) 120 incendiary bombs

88 severely damaged

Fires:

Bombs dropped:

Houses:

227 destroyed 527 severely damaged 379 medium damage 527 slightly damaged.

10 major, 68 medium and 95 smaller

Casualties:

The Eifeltor station and the line to Koblenz and Trier were seriously damaged as was also the bridge over the

65 dead, 27 injured, 34 missing and 3656

Klettenbergguertel as a result of an ammunition train blowing up. Only one industrial concern was slightly damaged.

COLOGNE As above 20/21 DECEMBER

The raid was made in the evening of 20 December between 1836 and 1908 hours by about 100 aircraft and affected mainly the W and NW outer districts.

1 large, 6 medium and 13 smaller fires.

Bombs dropped:

Fires:

Houses:

Casualties:

62 medium damage 115 slightly damaged.

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14 dead, 13 injured and 208 homeless.

Severe damage was caused to railway installations at Nippes where the tracks at the marshalling yards were hit and 40 trucks were burnt out and destroyed. The Railway Repair Works there were also badly hit. About 9 industrial concerns were also hit and damage was assessed in the main as severe. Among them was the Bauer Vehicle works and the Rhenania Machine factory.

/COLOGNE

## RESTRICTED

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24/25 DECEMBER

Between 60 and 80 aircraft were engaged on this raid from 1825 and 1837 hours when chiefly the north and northwestern parts of the town were attacked.

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Bombs dropped: 2 mines 490 H.E. (13 duds)

Houses:

29 destroyed 28 severely damaged 21 medium damage 98 slightly damaged.

2 medium and 1 smaller fires. Fires:

19 dead, 24 injured and 69 homeless. Casualties:

> The Courtaulds works were severely damaged and the airfield at Consider-Butzweilerhof was also hit. able damage was done to the permanent way at the marshalling yards at Nippes and an ammunition train blew up. A railway bridge was pierced by 3 H.E. and the line to Nuess was closed.

## 30/31 DECEMBER

Fires:

Houses:

The alert lasted from 1955 to 2139 hours during which time about 250 aircraft raided the southern part of the town and the right bank of the Rhein.

Bombs dropped: 19 mines 1150 H.E. (61 duds) 25000 incendiary bombs 62 phosphorous bombs.

> 3 large, 47 medium and 31 smaller fires.

115 destroyed 215 severely damaged 112 medium damage 274 slightly damaged.

24 dead, 36 injured and 565 homeless. Casualties:

> Damage was done to 6 police buildings including a barracks which was severely damaged.

Two railway stations and a goods station were severely damaged. Severe damage was caused to the Kalk works of Kloechner-Humboldt-Deutz and Hagen Accumulator works. The Kalk Chemical Factory was also seriously affected.

/Two

COLOGNE As above

COLOGNE

As above

#### RESTRICTED

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Two instances of damage to the autobahn are reported and the autobahn bridge over the Rhein at Rodenkirchen was damaged. Seven other main roads were damaged.

25/26 AUGUST

The force which carried out this raid was part of that force which visited Ruesselsheim.

Bombs dropped:

9 mines 34 H.E. 30000 incendiary bombs 30 phosphorous bombs 70 oil bombs

133 severely damaged

141 destroyed

Houses:

Casualties:

115 medium damage 1908 slightly damaged.

6 dead, 93 injured and 4000 homeless.

Industrial damage amounted to:

Roehm & Haag: severe damage by H.E. and incendiary bombs.

partial damage

Plexikum: destroyed.

Donges Stahlbau:

Opel Parts

Store: destroyed

Demag: slight damage

DARMSTADT 8a 2341 - LGK VII War Diary

11/12 SEPTEMBER

Two penetrations took place for this raid, the first of about 70 - 80 and the second of about 120 - 150 aircraft. It was referred to as a very heavy terror raid on the whole town area, about 75% of which was destroyed by fire.

About 1000 mines and H.E. ahout 200000 incendiary bombs

6000 destroyed and about 5000 damaged.

4000 dead, 6000 injured and 70000 homeless.

Several barracks were severely damaged and the local military command H.Q. was destroyed. The Goods station and the railway repair works were seriously

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G.3837/DOP/1/57/

DARWSTADT 8a 2341 - LGK VII War Diary E. 730 - Reg.Econ. Office, Wiesbaden

> It wa terro about Bombs dropped: About

> > •

Houses:

Casualties:

/damaged

- 28 -

damaged and a number of government buildings, including local government, were destroyed or damaged. These included the Police H.Q. and the Law Courts. The Technical High School was badly hit and 34 department stores and large shops were destroyed. Serious damage was also caused to the Demag Engine Works and three machine factories.

DARMSTADT E. 970 - LGK VII War Diary E. 730 - Reg.Econ. Office, Wiesbaden

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12 DECEMBER (USAAF)

At 1215 hours a heavy attack took place mainly on transport installations and the industrial and northwestern districts of the town.

Bombs dropped: 1200 H.E. 10000 incendiary bombs.

250 destroyed

16 major fires.

189 severely damaged 133 medium damage 304 slightly damaged.

Houses:

Fires:

Casualties:

99 dead, 111 severely damaged, 79 missing or unrecovered and 2350 home-less.

E. Merck Chemical works, Demag and Goebel A.G. were among the 13 industrial firms seriously affected. In addition 2 transport installations and 2 public service installations including the gas works were severely damaged.

DORTMUND 8a 2671 - Defence of Reich, Ops.

# 22/23 MAY

A medium heavy attack was carried out by about 400 aircraft from a height of 5500 to 7500 metres. They flew in close formation without any regard to flak. By changing course and considerable use of "Window" the position was made obscure. In defence 157 aircraft took off which claimed 22 kills and 3 possibles. Apart from considerable general damage 11 industrial concerns were hit.

#### DUESSELDORF

CD. 1015 - Chief ARP Warden E. 2606 - Min. of Arm. & War Prod. 22/23 APRIL

A large number of aircraft in several waves attacked mainly Rath, Klingen Friedrichstadt, Oberkassel, Wersten and Neuss from 0118 to 0145 hours.

Bombs dropped:

RESTRICTED

2000 H.E. (18 duds) 2000 oil bombs

/Fires:

- 29 - -

Fires:

Houses:

Casualties:

DUESSELDORF E. 2606 - Min. or Arm. & War Prod.

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<u>DUISBURG</u> 8a 2671 - Unknown FD. 4372/45 - I.G. Farben Damage Returns

21/22 MAY

2/3 NOVEMBER

Bombs dropped:

DUISBURG E.2606 - Min. of Arm. & War Prod.

30 NOVEMBER/ 1 DECEMBER

50 major, 135 medium and 254 smaller fires.

175 destroyed 200 severely damaged 328 medium damage 850 slightly damaged.

36 dead, 121 injured.

11 business houses, 1 bank and 5 department stores were destroyed. The Chemical Wire Industry was also destroyed. 4 industrial concerns were severely damaged. On Rheinmetall-Borsig in Rath and the immediate vicinity 2 mines, numerous H.E., 500 incendiary and 50 phosphorous bombs were dropped. Except for the H.E. these hit the works, destroying 27000 sq. metres of floor space. 2 railway and 1 post office installations were also severely damaged. All drinking water mains were destroyed.

This raid was carried out between 1909 and 1940 hours by some 800 aircraft. Particulars of the whole raid are not available but among the targets hit was the Rath works of Rheinmetall-Borsig, on which 10 mines, 90 H.E. and several 100 incendiary bombs were dropped. These destroyed about 50000 sq. metres of floor space. Apart from the bombs which fell within the works complex several 100 mines and H.E. bombs fell in the immediate vicinity.

Between 400 and 500 Lancasters flew to Duisburg to launch an attack from about 6500 - 7000 metres.

51 mines 161 H.E. 1000 incendiary bombs 5540 phosphorous bombs 30 jet incendiary bombs.

Apart from general damage done 17 industrial works were hit, including the I.G., Farben Oxygen plant, which was working again by 26 May.

Particulars of the raid on Duisburg itself are not available, only as far as the attack on the Krupps works in Rheinhausen is concerned. In this

/respect

## RESTRICTED

#### - .30 -

OCTOBER

Bombs dropped:

Fires:

Houses:

Casualties:

respect it is reported that about 50 aircraft attacked between 2008 and 2040 hours and dropped on the works and in the immediate vicinity 2 mines, 87 H.E. (22 duds) and about 500 incendiary bombs. Of these 63 H.E. (14 duds) and about 400 incendiary bombs, equal to a weight of 15750 kg. hit the works. Some 2560 sq. metres of floor space, including upper storeys were destroyed out of a total area of 325800 sq. metres.

The raid was carried out by about 400 -500 aircraft between 1921 and 2015 hours. Apart from the town itself, Krupps works were the main object of the raid. Figures in brackets in details below apply to Krupps only.

200 mines 4000 (602) H.E. (60 duds and 10 D.A. at Krupps) 60000 (5000) incendiary bombs 5000 (25) phosphorous bombs.

100 major, 200 medium and 1200 smaller fires.

285 destroyed 611 severely damaged 1923 medium damage 3827 slightly damaged

89 (8) dead, 218 (24) injured and 200 buried.

At Krupps most of the production loss was caused by failure of gas and electricity supplies. Damage to machinery was in the main slight to medium.

In the Armour Plating Annealing Plant damage was caused to 3 furnaces, gas production plant and the roofs of almost all the workshops. No. 1 Armour Plate Rolling Mill sustained severe damage from direct hits on the rolling mill engine, a crane, steam and electricity conduits.

The Spring Workshops suffered severely, Machinery and equipment were, in part, badly damaged or destroyed and structural damage was also severe. Various machines, including an assortment of boring machines, in No. 2 Repair Workshops were damaged.

/Considerable

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# G.3837/DOP/1/57/

ESSEN

FD.4401/45 -

Krupps

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25 CCTOBER

Considerable damage was caused to the works railway network.

The foundry at Borbeck was only slightly affected and production there continued almost uninterruptedly.

This heavy raid affected not only the Krupps Steel works but also the Borbeck Foundry. As far as Krupps, as distinct from Essen as a whole, is concerned, about 300 - 400 aircraft were engaged and the works alarm sounded at 1508 until the all clear at 1555 hours. Bombs dropped included 575 H.E. of which 74 were duds and 6 D.A., and 4500 incendiary The severest damage was bombs. caused to the northeast portion of the works although the whole works Damage was severe to was affected. very severe in most departments. The power supply was seriously affected as well as some power plants. The works railway and some bridges, including one arch of the nickel steel bridge which was completely destroyed, sustained additional severe damage. Fire-fighting was rendered particularly difficult because the waterpipe network supplied no water and emergency water tanks which had been damaged in the previous raid were empty. In spite of this no major fires developed. Casualties amounted to 29 dead and 43 injured.

In the Armour Plated Annealing Plant some 30 metres of the generator gas pipe were destroyed. A steam crane of the drop forge was severely damaged. No. 2 Blast Furnace at the Borbeck Foundry was severely damaged by 4 H.E. bombs.

ESSEN E.1319 - Krupps.

ESSEN

As above

12/13 DECEMBER

The only available report on this raid concerns solely the Krupp Works and does not include the town of Essen itself. The warning lasted from 1839 to 2010 hours.

Bombs dropped:

264 mines or H.E. (45 duds) About 1000 incendiary bombs.

In a large number of sections of the works no appreciable damage was caused. In the Thin Sheet Rolling Mill several H.E. bombs caused considerable damage including a

/furnace

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furnace and hits were scored on the cold rolling plant.

A smokestack collapsed and a furnace was put out of action in the No.1 Armour Plate Rolling Mill.

Seven hits were scored on the Armour Plate Annealing Plant, badly damaging a furnace and generator and gas supply lines.

The Wheel Rim rolling mill also sustained direct hits on the Ilgner plant, control room and the reserve store in the cellar. Severe new damage was also caused to electrical plant including the electric truck station.

The tool repair section and machinery was damaged when hits were scored on No. 1 Tank Construction Plant.

Considerable damage to buildings and the destruction of the saw mill and other workshops was caused when 21 H.E. bombs fell on the works services department. Some of the track of the works railway

Some of the track of the works railway system was destroyed.

Between 1103 and 1200 hours the town centre and the suburbs of Sachsenhausen, Roedelheim and Bockenheim were subjected to an attack by about 6 formations under strong fighter escort, in all about 600 aircraft. It is referred to as a heavy terror raid and considerable damage was caused to the main business centre and the neighbourhood of the Central Station.

Bombs dropped:

150 mines 1200 H.E. 130000 incendiary bombs 10000 phosphorous bombs.

532 destroyed 515 severely damaged 898 medium damage 4675 slightly damaged.

No details are given of dead and injured but 25900 were rendered homeless.

The laboratory of the Metallgesellschaft was hit by H.E. and there were several hits scored on the Degussa Works. Considerable

/destruction

FRANKFURT E.1322 - Min. of Pub. Inf. & Prop. E. 855 - Railway ARP.

Pouns aropped

29 JANUARY

(USAAF)

Houses:

Casualties:

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destruction was wrought at the Torpedo Works and direct hits were recorded at the Naxos-Union and the firm of Claus-Mayn.

The Central Station was closed and all rail traffic suspended. Several military installations were hit including the Hausen Flak barracks, where direct hits were scored, killing 60 officers and men.

FRANKFURT 8a 2341 - LGK VII War Diary. E. 730 - Pres. Land Econ. Office

### 18/19 MARCH

Although Frankfurt was the main target, Offenbach to the east and Ruesselsheim to the southwest were also attacked. Several hundred aircraft penetrated the Luftgau between 2058 and 2218 hours and dropped their bombs mainly on the town centre, the whole of the eastern sector, the southern suburbs and Offenbach.

Bombs dropped:

Houses:

• • •

Business Houses:

Public Buildings:

Casualties:

21 mines 3304 H.E. 20000 oil bombs 80000 incendiary bombs M.G. fire was directed against the army train on the Hanau-Louise line, killing 20 and injuring 80 members of the forces.

1350 destroyed 1215 severely damaged 750 medium damage 1100 slightly damaged.

108 destroyed179 severely damaged127 medium damage102 slightly damaged.

25 destroyed 17 severely damaged 14 medium damage 8 slightly damaged.

160 dead, 1860 injured, 260 buried and 35000 homeless.

27 industrial concerns were hit. Among the public buildings hit were the Opera House, Police H.Q., Town Hall and the Municipal Administration in the Kornmarkt.

At Offenbach the northwest part of I.G. Farben was hit by H.E. and incendiary bombs. The production of

/potassium

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potassium nitrate was temporarily stopped and damage was also caused to the nitrogen plant. Various workshops were also burnt down. Although details of the damage at Offenbach were not available at the time of the report from which the above has been taken, it is reported as "extraordinarily heavy, 1400 fires, 13 industrial concerns hit". In the Opal works area in Ruesselsheim minor damage, mainly to roofs and windows, was caused and production was not interrupted.

13319 rounds of Flak ammunition were expended. Some damage was caused to Flak installations and 17 huts were destroyed. In a later report the following damage to houses in Offenbach is recorded:

1279 destroyed 1006 severely damaged 662 medium damage 903 slightly damaged,

and about 30000 were rendered home-less.

NOTE: The figures shown above are given in the German document (E.730) as applying to both the raids of 18/19 and 22/23 March. In the report of the raid on 22/23 March, however, Offenbach is specifically excluded from the damaged area. Therefore at least the majority of the above damage can be reckoned as having been caused during the raid of 18/19 March.

At first single and then several hundred aircraft began to penetrate at 2111 hours and continued until 2202 hours. The majority came to the Frankfurt area from the north. Immediately after the warning a few aircraft were over Frankfurt and they were believed to be carrying out a nuisance raid. Then suddenly at 2140 hours H.E. and incendiary bombs began to rain down. The whole town area was affected with the exception of Schwanheim, Goldstein and Offenbach.

The following particulars cover also Mainz, the airfield at Wiesbaden/ Erbenheim, Spreudlingen and 13 other

/incidents

# 22/23 MARCH

G.3837/DOP/1/57/

FRANKFURT

As above

## RESTRICTED

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incidents on small places and open country in the neighbourhood of Frankfurt.

Bombs dropped:

42 mines 122 H.E. - 4000 lb. 1100 H.E. - smaller calibre (400 duds) 7875 phosphorous and oil bombs 1202290 incendiary bombs.

1920 major, 1845 medium and 2337

50 dead, 1135 injured and 120000

4132 destroyed

smaller fires.

homeless.

2772 severely damaged 2128 medium damage 3875 slightly damaged.

Houses:

Fires:

Casualties:

No.2 Works of the Adler-Werke was destroyed and Nos. 1 & 3 works severely damaged. The Torpedo-Werke and the Griesheim Works of I.G. Farben were hit.

Severely damaged railway buildings include the Central Station, Hoechst Station, South Station and railway sidings at Griesheim. The Autobahn, main post office, tramway workshops and a bus station were also damaged. Several barracks and military installations and premises were badly hit as well as Rebstock Airfield, where several hangars were destroyed by fire, and the Police H.Q.

The local Chief ARP. Warden remarked: "Such weight of attack had never before been seen. The available fire fighting equipment was not even remotely sufficient to master the outbreaks of Forces from outside Frankfurt fire. arrived after considerable delay and in. It is thanks to the small formations. efforts of all personnel that, so far as can be ascertained, the population could be saved from areas threatened by fires and fire storms. The total number of casualties cannot yet be assessed."

FRANKFURT As above

#### 12/13 SEPTEMBER

RESTRICTED

Strong formations of heavy bombers penetrated to the Stuttgart area. The majority, about 480, then turned north to the Darmstadt/Frankfurt area. The main target wwere the Central Station

/and

G.3837/DOP/1/57/

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and neighbourhood and the industrial quarter in the West. Fires broke out in the armaments factories of Naxos-Union-Adler works and Hartmann & Braun.

No information is available concerning

injured but 40000 people were rendered

the number of bombs dropped and dead and

Bombs dropped & Casualties:

homeless.

Houses:

1422 destroyed 879 severely damaged 858 medium damage 2584 slightly damaged.

The airfield at Frankfurt/Rebstock was hit by about 20 H.E. and many thousands of incendiary bombs. The garages were 80% and accommodation blocks 60% damaged.

FRANKFURT E. 970 - LGK XIV

FRANKFURT

E. 970 - LGK XIV

E. 730 - Reg. Econ.

Office,

Wiesbaden.

25 SEPTEMBER (USAAF)

**5** NOVEMBER

(USAAF)

Houses:

From 1129 to 1203 hours about 200 -300 aircraft participated in a heavy raid in which carpets of bombs fell on the East Harbour area. The neighbourhood of the Central Station, the town centre, Sachsenhausen and Offenbach were also affected. Details of bomb tonnage are not given. An air raid shelter for 300 people was hit and 100 were killed by escaping gas. Much damage was caused to transport installations, tramways and streets apart from buildings. The Post Office, Police H.Q. and 7 factories were hit. Casualties amounted to 192 dead, 138 injured, 320 missing and 2300 homeless.

Between 1030 and 1250 hours about 1400 Fortresses and Liberators with about 800 fighters entered the Luftgau area, the majority making for Frankfurt. They carried out a heavy attack mainly directed against the Centre, east, west and south sectors of the town. The Goods Station and West Station were damaged as well as as 3 barracks and the Folice H.Q. No details of bombs dropped are available.

91 destroyed 157 severely damaged 205 medium damage 1267 slightly damaged.

/Casualties:

#### <u>RESTRICTED</u>

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Casualties:

No information is available about dead and injured but 4000 were rendered homeless.

FRANKFURT As above 11 DECEMBER (USAAF)

Bombs dropped:

Houses:

Casualties:

At about 1118 hours a strong force of bombers with fighter escort attacked the east and south of the town as well as Offenbach and Bieber.

4 mines 1200 H.E. 150 incendiary bombs.

135 destroyed 136 severely damaged 138 medium damage 3300 slightly damaged

20 dead, and 3000 homeless.

This was part of the raid also

directed against Munich and a number

The gas works and I.G. Farben in Offenbach and 3 other firms were hit. Electricity supply failed and serious damage was caused to the permanent way in the east and south of the town, cutting the lines. One rail and road bridge was severely damaged.

<u>FRTEDRICHSHAFEN</u> 8a 2341 - IGK VI War Diary 18 MARCH (USAAF)

Bombs dropped:

Houses:

Fires:

Casualties:

40 severely damaged 120 medium damage 250 slightly damaged.

of airfields.

15 destroyed

110 H.E. (10 duds)

2200 oil bombs (200 duds)

21 major, 40 medium and 120 smaller fires.

23 dead, 21 injured, 15 buried and 1100 homeless.

At the airfield the taxying area received 8 heavy hits and one Fw 204 was slightly damaged. The Flying Control of the Dornier works with store rooms, office of the Air Ministry overseer and parachute stores was burnt down.

At the Maybach Engine Works fire caused damage to workshops, sheds and an army spare parts store.

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The main production department and machines of the Toothed Wheel Co. were hit, particularly the shaft production in No. 11 workshop. The spare parts stores in the Paulinenstrasse was destroyed.

Severe damage was done to the administrative buildings of the Zeppelin works and 10 of the 50 Wuerzburg Riese radar instruments stored in the open were damaged. At the Manzell and Allmannsweiler Dornier works some damage was caused resulting in a delay of a fortnight in the monthly programme.

#### FRIEDRICHSHAFEN

27/28 APRIL

As above and FD.3049/49-Postwar Study Folder No.4-by Saur About 200 aircraft dropped their bombs between 0203 and 0215 hours. Some of the bombers attacked from the S to N, others from N to S from a height of about 4000 to 5500 metres.

Bombs dropped:

50 mines 700 H.E. 20000 incendiary bombs 5000 phosphorous bombs.

Houses:

656 destroyed421 severely damaged422 medium damage630 slightly damaged

Casualties:

117 dead, 239 injured and 15000 homeless.

Maybach Engine Works, the Dornier Works at Manzell and Allmannsweiler, the Zeppelin Works and the Toothed Wheel factory were all very severely or severely damaged. The railway suffered severe damage at 9 places but was running normally again on 2 May. Severe damage to the Electricity works resulted in partial supplies only after 4 May.

Gas supplies were interrupted for even longer and the water works was still mainly interrupted on 4 May.

A number of decoy sites were also attacked and on these 3 mines, 85 H.E., 700 incendiary and 80 phosphorous bombs were dropped.

Emergency equipment of all kinds was brought in from the surrounding districts. Field kitchen units and military bakery companies were moved

/in

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in, tents were set up and beds, bedclothes, cooking utensils and cutlery were provided. Bicycles and building implements (chopping axes, shovels etc.) were also made available.

In addition to all this three special goods trains were despatched fullyloaded from Berlin on the first night alone to convey all the necessary auxiliary equipment to the damaged area, so that repair work might start at once.

Although the gaps in production caused by the attack seemed insuperable at first sight, it was in fact possible to bridge them in a remarkably short space of time, although the bombing of the factories where tank motors and driving gear were being manufactured and where production of the new Dornier 335 had just begun had not only caused untold havoc in the factories themselves, but had also almost completely paralysed the life of a whole town.

FRIEDRICHSHAFEN As above 20 JULY (USAAF)

Bombs dropped:

Casualties:

Between 1019 and 1050 hours about 400 bombers in several waves crossed the Alps and attacked the town and industrial areas.

1500 H.E. 10000 incendiary bombs.

209 dead, 94 injured and 3500 homeless.

At the Maybach Engine Works severe damage to buildings was caused. The Dornier Works in Friedrichshafen suffered very severe destruction. Assembly E continued to function at The Ju 88 Works the dispersel site. It was not 752/237 was destroyed. possible to repair the damage to the Final assembly Allmannsweiler Works. Various aircraft had to be evacuated. were destroyed.

At the Loewental Works severe damage was caused and power supplies were interrupted. The taxying area was damaged by direct hits and 2 hangars sustained medium damage. The flying control buikding and 5 aircraft were severely damaged.

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Two hangars at the Zeppelin Works were destroyed and Hangars 2 and 3 to 40% destroyed. Various other hangars were hit afresh. In addition railway installations were severely hit and all telephone cables were destroyed.

In the area around Friedrichshafen further bombs (220 H.E., 8000 incendiary and 50 oil bombs) were dropped. Casualties here amounted to 10 dead, 25 injured and 400 homeless.

<u>GAGGENAU</u> C.D. 320 - NSDAP, Rastatt.

#### 10 SEPTEMBER (USAAF)

This raid, made by about 250 aircraft between 1050 and 1130 hours, was aimed mainly at the Daimler-Benz works, with secondary targets of railway installations and other localities including Gernsbach and Rotenfels.

Bombs dropped: 6 - 700 H.E. (41 duds) about 23100 incendiary bombs (600 duds)

20 oil bombs.

524 destroyed

114 severely damaged 72 medium damage 127 slightly damaged.

Houses:

Casualties:

153, dead, 85 injured and 4270 homeless.

Daimler-Benz is reported 80-90% destroyed and 100% unproductive until 23.9.44. Until that date there was no power. It was probable that by the end of October considerable production would be possible again.

The Gaggenau Iron Works suffered 50-60% damage which caused considerable reduction of output for 14 days.

The automobile factory of Gottfried Lindner was 100% destroyed.

The water works were destroyed and the gas and electricity works suffered severe and slight damage respectively.

Railway installations were also hit badly. All telephone and teleprinter services failed. At Gernsbach the Badenwerk of the electricity works supplying the town was damaged and water supply was also interrupted. The railway line to Hoerden was destroyed.

/At

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At Rotenfels the Ferdinand Rahner Sawmills sustained severe damage, in particular the wood-working department which was manufacturing for the armoured vehicle programme and which was destroyed. It was estimated that production would cease in this department for 2 - 3 months as new accommodation was necessary and 50% of the machinery needed replacement.

Some 150 aircraft attacked between 1125 and 1150 hours. The main target was again the Daimler-Benz works and the town.

5 mines 1110 H.E. (18 duds) 10700 incendiary bombs (220 duds)

75 destroyed 133 severely damaged 145 slightly damaged.

55 dead, 43 injured and 780 homeless.

The damage caused by the raid of 10 September to Daimler-Benz was added to and the works was considered destroyed. Production ceased until dispersal arrangements were completed. A further 6 concerns were destroyed including one iron and steel works, one electrical and fine mechanical works and three works in the clothing, textile and leather industry. Water supplies were seriously affected and telephone services also failed.

During the night of 12/13 June an attack was made on the Gelsenberg aviation fuel plant (in Gelsenkirchen/ Horst) which, in view of the level of its production, is second in importance to Poelitz. All the vital parts of the plant were heavily damaged and there will be no production for at least three months.

During the night of 14/15 June an attack was made on the plant at Scholven (in Gelsenkirchen-Buer), which is in fifth place on the production scale (directly after Leuna). Production was halted temporarily at the plant which sustained comparatively slight damage but will be resumed in a few days.

/The

#### RESTRICTED

GAGGENAU As above

> 12/13 JUNE 14/15 JUNE

3 OCTOBER

(USAAF)

Houses:

Casualties:

Bombs dropped:

G.3837/DOP/1/57/

GELSENKIRCHEN

E.2700 - Lw. Ops. Staff. E.2606 - Min. of Arm.

& War Prod.

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The monthly loss of production amounts to 39000 tons of 17/2 of production for the whole of Germany, bringing the total loss for Germany to 140000 tons a month or 73/2. Gelsenberg will not be ready for production again for several months.

In addition Document E.2606 gives details of raids on the Scholven Hydrogenation Plant, of which the following were the heaviest:

Date	Time	A/C.	H.E.	On Works
22. 6. 19. 7. 26. 8. 12. 9. 6.10. 1.11. 11.11.	0142 - 1157 0126 - 0140 1218 - 1231 1328 - 1405 1657 - 1706 1354 - 1402 1120 - 1128	200 350 80 500 100 200 150	800 2000 600 2500 500 1500 800	33 550 400 350 200 200 200 40
	Total:	1580	8700	1773

It is also reported that 291433 sq. metres of floor space were destroyed.

About 400 bombers entered the LGK area and some carried out a heavy raid on Giessen between 2000 and 2030 hours affecting the whole town. All communications broke down. Fires broke out all over the town and water supplies failed, necessitating drawing from the River Lahn for fire fighting.

Bombs dropped: 1400 H.E.

16000 incendiary bombs.

148 dead, 135 injured and 35000 homeless.

2700 destroyed 500 severely damaged 100 medium damage.

4 area, with a fire storm in the town centre, 200 medium and 100 smaller fires.

Serious damage was caused to the railway permanent way but only slight damage to station buildings. The post office repeater station failed and all communications were interrupted. Of 5 industrial concerns hit 3 were destroyed as were 14 public buildings.

<u>GIESSEN</u> E. 970 - LGK XIV E. 730 - Reg.Econ.

730 - Reg.Econ. Office, Wiesbaden

Houses:

Casualties:

7 DECE BER

Fires:

/In

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In a report dated 20 December it is stated: "The firm of Poppe is as good as a total loss. Reconstruction of the firm Baenninger will take some months and the firm of Hayligenstadt will be operating again in the near Industry in Giessen is again future. being supplied with electricity. The Electricity Works were allotted 150 workmen in order to carry out the repair works with all speed. The population will receive electricity supplies in about 8 days".

The gas works was completely destroyed and not considered worth rebuilding. One army barracks was destroyed and one severely damaged. The Armaments and Garrison H.Q. were destroyed.

Details of this raid should be combined with those of the attack on Oschersleben, the force (estimated number not given) being part of the total despatched. The attack which was described as light was carried out in several waves.

It is estimated that about 100 light H.E. and 2000 oil and incendiary bombs were dropped.

3 dead, 7 injured.

A number of fires were started. Α production hall at Junkers Works was burnt out and another damaged. The station was set on fire.

A heavy raid took place between 0844 and 1050 hours when about 800 aircraft paid a visit.

some 1000's H.E. several incendiary and jet incendiary bombs.

27 major fires. ...\*

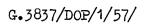
168 dead (100 foreigners) 156 injured and between 250 and 300 were buried under debris.

10 destroyed 7 severely damaged 8 medium damage

7 slightly damaged.

/The

RE'STRICTED



HAMBURG

HALBERSTADT

E. 1322 - Min. of Pub.

Inf. & Prop.

CD. 1268 - Works ARP. Nordmark.

Bombs dropped:

#### Fires:

Casualties:

Industrial:

Bombs dropped:

Casualties:

18 JUNE

(USAAF)

11 JANUARY

(USAAF)

- 44 -

The Asbestos and Rubber works of Martin Merkel K.G. in Wilhelmsburg were hit by 4 H.E. and the works was nearly destroyed by fire. Production was stopped 100, for about 3 weeks.

A considerable amount of damage was caused by 132 H.E. bombs which fell on Blohm & Voss. Electricity, gas and water supplies failed as well as travelling facilities which caused reduction in output. 50 H.E. bombs hit No.3 Works of the Deutsche Werft destroying the workshops and damaging the new construction of submarine chasers and a floating dock. The Eurotank Oil installations at Finkenwaerder received several direct hits.

The transformer installations, siding, cranes, locomotive sheds with locomotives etc. etc. were destroyed and oil filling station, tank trucks and the administrative building were severely damaged, causing a 100% reduction in production for an indefinite period. The Hanseatic Acetylene Gas Co. in Wilhelmsburg was hit by several H.E. bombs and 1000 cylinders were destroyed. Production was cut by 100% for a considerable time and 80000 kg. of acetylene per month was lost.

In clear weather about 800 aircraft carried out a heavy raid between 0745 and 1122 hours, directed against the districts of Harburg, Wilhelmsburg and the petroleum harbour. The figures of bombs dropped and casualties apply to industrial works and not to the town as a whole.

Bombs dropped:

20 JUNE

(USAAF)

Casualties:

13 incendiary bombs 70 oil bombs.

32 mines (4 duds)

1934 H.E. (53 duds)

231 dead, 190 injured and 6 missing.

Among the 15 works recorded as severely damaged are:

German Mineral Oil Co. in Wilhelmsburg: The works was hit by 125 H.E., destroying the laboratory, Despatch, Stores, pump house etc. and all other buildings were affected to a greater or lesser degree. Production was cut 100%.

/Ebano

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HAMBURG

As above

/Eba

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Ebano Asphalt Works, Harburg: The Works was totally destroyed. One distillation plant which remained was useless because ancillary plants were destroyed. A few small and one 12000 cubic metre tank were undamaged.

European Tank Installation and Transport <u>Co. in the New Petroleum Harbour:</u> Between 150 and 200 H.E. bombs (3 duds) were dropped on the works. The boiler house and transformer station as well as 3 tanks were destroyed and the metal workers' and carpenters' workshops and some tanks were severely damaged. The administrative building was also severely damaged. Production was cut by 100%.

Noblee & Thoerl, Harburg: Production was cut by 50% as a result of 90 H.E. which destroyed the machine room of the press department, the metal workshop etc. and severely damaged the boiler house, hydrogen plant, oil store house, tank installations, transformer station, pumping station etc. Some tanks were destroyed.

Koeser & Meyer, Norderwerft: The casualties here were heavy, 60 dead and 80 injured. A direct hit was scored in the shelter under the office building and on the rear part of the building in No.3 Factory under which there was also an air raid shelter. A tug and a salvage ship were sunk. Production was cut by 50%.

Rhenania-Ossag, Harburg: The works were hit by about 300 H.E. bombs, affecting all installations and tank pits. Production was cut but at the time of the report (1 July) the amount of damage had not beem assessed. A further 14 concerns suffered medium and 16 slight damage.

The inner town, Altona and the harbour provided the chief targets for 2 - 300 aircraft when they carried out a raid between 0039 and 0155 hours.

Bombs dropped:

28/29 JULY

30 mines 2800 H.E. (250 duds or D.A.) 1800 incendiary bombs 300 phosphorous bombs 120 oil bombs 32 marker bombs.

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#### RESTRICTED

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HAMBURG

As above

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The ship building firm of Blohm & Voss was hit by 41 H.E. bombs (5 duds or D.A.). Damage was caused to a number of buildings, crane installations, workshops and stores. At the Howaldtwerke the central portion of the administrative building was destroyed for a length of about 50 metres.

In all 6 concerns were severely damaged, 17 sustained medium and 51 slight damage.

HAMBURG As above

6 AUGUST (USAAF)

Bombs dropped:

Casualties:

About 500 aircraft carried out this raid in clear weather between 1034 and 1420 hours.

3400 H.E. (182 duds or D.A.) a small number of oil bombs.

In Works ARP concerns only: 3 dead and 19 injured.

In all 9 works were severely damaged and 13 suffered medium and 9 slight damage. At the German-American Petroleum Co's petrol plant at Schulau 30 H.E. bombs hit the works and destroyed 5 tanks, the boiler house, pipe lines and steam ducts. Also 2 tanks and the distillation plant were severely damaged.

110 H.E. (8 duds or D.A.) fell on the German Mineral Oil Works in Wilhelmsburg. Here Nos. I and II Administrative Buildings, Crude Oil Distillation I and II, Phenol plant and a number of other buildings were destroyed, or damaged. Production was cut 100%. The German Vacuum Cil Co. in Wedel was the recipient of some 250 H.E. bombs of which 50 - 60 were either duds or D.A. Buildings destroyed included the refinery tank installations, transformer and electric power plant, locomotive sheds, tank trucks, sidings and pipe lines. Production was reduced by 75/00

Damage at the Rhenania-Ossag Mineral Oil Works in Grasbrook included:

destroyed:

oyed: 9 oil tanks 2 refinery buildings 1 oil pumping house

/damaged:

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damaged:

13 oil storage tanks, boiler house laboratory building

At the Hafenstrasse branch some 450 H.E. bombs (75 duds or D.A.) all buildings and works installations were Large fires broke out in a hit. number of tanks which were extinguished by the early hours of the following morning. It was estimated on 21 August (date of report) that the works would be at a standstill for several weeks due to the failure of power and water supplies and damage to the boiler house.

Fire broke out at Noblee & Thoerl in Harburg as a result of 70 H.E. (24 duds or D.A.) which caused only slight damage.

In 3 - 4 waves some 800 aircraft attacked the harbour, industrial and residential areas of the town from about 1221 until 1414 hours.

5 - 6000 H.E. (52 duds or D.A.) 25000 incendiary bombs.

777 dead, 566 injured and 10 missing.

The administrative buildings and all production installations were destroyed at the Ebano Asphalt Works in Harburg. At the Barmbeck Gas Works the boiler house and two gasometers were hit and put out of action. Six tanks of the Brinkmann & Mergell Oil Works in Harburg were destroyed and a further 7 tanks as well as pipe lines and bridges were damaged. At the Hamburg Rubber Works, Phoenix, 70 H.E. bombs destroyed the Technical workshops and gas mask production. In all 3 works were destroyed, 15 severely damaged and 9 suffered medium and 22 slight damage.

Of a total of about 600 aircraft which penetrated Northwest Germany, some 400 launched an attack on the industrial areas of Harburg, Wilhelmsburg and Veddel and the harbour area from 1144 to 1215 hours in several waves.

2800 H.E. (49 duds or D.A.) Some incendiary bombs were also dropped.

/Houses:

HAMBURG 25 CCTOBER CD. 1268 - Works ARP, Nordmark. CD. 1261(a) - Orpo.

Bombs dropped:

Casualties:

(USAAF)

HAMBURG . . CD.1261(a) - Orpo 4 NOVEMBER (USAAF)

Bombs dropped:

G.3837/DOP/2/57/

### : \_ 48 -

Fires:

Casualties:

Houses:

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HAMBURG As above

11/12 NOVEMBER

104 destroyed 126 severely damaged 105 medium damage 115 slightly damaged:

18 major, 4 medium and 6 smaller fires.

204 dead, 239 injured; 8 missing or still buried under debris and 6000 rendered homeless.

Severe damage was caused to 7 industrial concerns including Noblee & Thoerl (oil) and Phoenix Rubber Works.

A number of other concerns suffered medium heavy damage, among which were Brinkmann & Mergell (oil), Deutsche Oil Works, Rhenania-Ossag, Harburger Iron and Bronze Co., two chemical factories and Blohm & Voss, where a number of machine and construction shops were hit. 6 U-boats and a destroyer under construction were damaged.

The electricity, gas and water works also sustained severe to medium damage. The Harburg Goods Station received medium damage. All lines in an out were closed and some ammunition and goods trucks were set on fire. Rail and tram traffic between Hamburg and Harburg was stopped.

From 1900 to 1945 hours about 300 aircraft attacked in several waves from various directions. The main targets were in the town and industrial areas of Harburg as well as Wilhelmsburg. The report from which this information is taken is dated 12 November.

Bombs dropped:

Fires:

47 mines,

2500 H.E. (numerous duds or D.A.) 45000 incendiary bombs 1100 phosphorous bombs 500 oil bombs.

17 major, 51 medium and a large number of smaller fires. In Harburg there were also a number of small area fires.

Houses:

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- 49 -

Houses:

Casualties:

111 destroyed95 severely damaged64 medium damage156 slightly damaged.

23 dead, 16 injured, 45 missing and some 6300 homeless. It is expected that these numbers will increase.

The ships chandlers, Schoen & Co. was destroyed and a number of oil firms, such as Noblee & Thoerl, Rhenania-Ossag, Brinkmann & Mergell and the Ebano Asphalt Co. were severely damaged.

The Harburg regulator station of the Hamburg Gas Works was destroyed.

The Harburg Railway Repair Works were severely damaged.

Bombs were dropped from 1203 to 1235 hours when 350 - 400 aircraft attacked in several waves. Harburg, Wilhelmsburg, Altona, St. Pauli and the harbour districts were the chief targets and the main weight fell on Harburg and Wilhelmsburg. The date of the report from which this information is taken is 21 November.

some 3000 H.E. (90 duds or D.A.)

18 major, 6 medium and 6 smaller fires.

68 destroyed 62 **severely** damaged 64 medium damage 176 slightly damaged.

138 dead, 150 injured, 120 missing and 2000 homeless. It is considered that the number of dead and injured will rise.

About 21 industrial concerns were among those targets hit. Of these Blohm & Voss was severely damaged. No.2 Machine Factory, the metal forge and Berths 8 and 10 sustained severe and No.1 Dock (U-boats) medium damage.

/Rhenania-Ossag

#### HAMBURG As above

21 NOVEMBER (USAAF)

Bombs dropped:

Fires:

Houses:

Casualties:

G.3837/DOP/2/57/

### ·\_- 50 --

31 DECEMBER

(USAAF)

Bombs dropped:

Casualties:

Rhenania-Ossag suffered damage by fire, 2 tanks being burnt out. Other firms were: Ebano Asphalt Co., Noblee & Thoerl, Phoenix Rubber Co. and Christiansen & Meyer Machine Co., where the new boiler forge, smithy and rolling mill were the sections mainly affected. At the Deutsche Benzolverbrieb several oil tanks were burnt out.

Water supplies for Harburg failed due to the water works at Neugraben and Wilhelmsburg being without power and numerous large and small water main bursts.

The railway installations in Harburg and Wilhelmsburg were also damaged causing interruption in traffic to Hamburg and at the goods and shunting stations.

About 300 aircraft in several wayes carried out a raid between 1032 and 1245 hours (duration of alert) on Harburg, Wilhelmsburg and the Harbour with St. Pauli.

3500 H.E. (90 duds or D.A.) 70 oil bombs

In factories only: 131 dead, 123 injured.

Blohm & Voss Steinwaerder works were hit by 70 H.E. bombs and numerous oil bombs causing 5 U-boats to be damaged of which one was sunk. Some 100 H.E. and a number of oil bombs hit the German Mineral Oil Works at Wilhelmsburg. Severe damage was done to tanks and production installations. Very severe fires broke out in tanks.

The 3 Rhenania-Ossag works were hit by about 215 H.E. causing damage to tank installations, workshops and pipe lines. The Wilhelmsburg works was put out of action for 3 - 4 weeks. In all severe, medium and slight damage was done to 14, 12 and 19 works respectively.

/KAISERSLAUTERN

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HAMBURG

CD.1268 - Works ARP,

Nordmark.

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RESTRICTED

G.3837/DOP/2/57/

#### - 51 -

KAISERLAUTERN FD. 2078/45 - ARP,

30 DECEMBER .

K'lautern

The alarm was sounded at 1003 and the raid started at 1030 hours. The number of aircraft is not given nor details of damage caused. The attack was directed against military installations, the Central and Shunting Stations, industrial installations and residential districts.

1500 H.E. (15 duds) 800 incendiary bombs 2 petrol bombs 10 phosphorous bombs

68 destroyed 95 severely damaged 12 medium damage 188 slightly damaged.

25 dead, 27 injured and 21 missing.

Bombs were also dropped in already damaged or destroyed buildings in the town area.

Some 250 - 300 aircraft carried out a heavy raid between 0030 and 0100 hours. A large number of bombs dropped fell on open country. The periphery of the town and districts of Rintheim and Hagsfeld which were 70 destroyed were mainly affected. The following numbers of bombs dropped, houses damaged and casualties apply to the town and country districts of Karlsruhe.

Bombs dropped:

Houses:

Casualties:

58 mines ) (90 duds 600 H.E. ) or D.A.) about 65000 incendiary bombs of various kinds, of which there were some hundreds of duds.

1178 destroyed 655 severely damaged 3471 slightly damaged

138 dead, 487 injured and 6500 homeless.

#### /Fires:

#### RESTRICTED

KARLSRUHE 8a 2341

25 APRIL

LGK VII

War Diary CD. 325 - NSDAP H.Q. 60 oil bombs.

Bombs dropped:

Houses:

Casualties:

- 52 -

Fires:

75 large, 240 medium and 260 smaller fires.

Of 27 industrial concerns affected, one was destroyed and 9 sustained severe damage. Gas supplies which failed due to severe damage to one and slight damage to another gasworks were restored by the end of the month. One barracks (the Mackensen) was severely damaged, several buildings in the complex being burnt down.

The Groetzingen Iron Works was destroyed with no possibility of being rebuilt. The Deutsche Waffen and Munitionsfabriken in Groetzingen were severely damaged.

Heavy damage was caused to the tracks at the Central Station and to the railway repair works at Durlach.

The target was the Central Station and railway installations at the marshalling yards and the raid took place from 1030 to 1058 hours, the bombs being released from a considerable height. Defence was supplied by Flak and fighters and 4 raiders were shot down.

) (20

Bombs dropped:

Houses:

310 H.E. (25 duds) ) D.A.) 12000 incendiary bombs (100 with explosive heads).

41 destroyed 113 severely damaged 54 medium damage 188 slightly damaged.

8 mines

Casualties:

139 dead, 249 injured and 1170 homeless.

About 20 H.E. (6 duds) bombs fell on the passenger station causing severe damage. Some 8 - 10 bombs fell on the lines cutting the through line and hitting a transport of P.O.W., killing 93 (included in the casualty figures above). The Goods Station and sheds were destroyed as were also the railway repair works. The marshalling yards were hit by some 70 H.E. and 4 signals boxes were destroyed.

/KARLSRUHE

#### RESTRICTED

KARLSRUHE CD. 318 - NSDAP, Karlsruhe CD. 325 - NSDAP, H.Q.

AUGUST

(USAAF)

- 53 -

KARLSRUHE CD. 325 - NSDAP H.Q. 5 SEPTEMBER (USAAF')

Bombs dropped:

Houses:

Casualties:

This raid aimed chiefly at railway installations was carried out by about 300 bombers from a height of 7000 metres between 1134 and 1205 hours.

1500 H.E. (97 duds and 50 D.A.) 15000 incendiary bombs with explosive heads of which 500 were duds.

157 destroyed 282 severely damaged 771 slightly damaged.

114 dead, 300-400 injured and about 100 missing and 5240 homeless.

The Railway Repair Works, the Shunting Station and a number of stretches of line were severely damaged and No.1 Signals Box was destroyed. At the Marshalling Yard an ammunition train was hit causing severe explosions. The tramway service and gas, water and electricity supplies were partially disrupted.

About 250 aircraft of the force referred to in the introductory comments to the raid on Ludwigshafen on this date visited Karlsruhe and bombed between 1150 and 1210 hours.

2000 H.E. (150 duds and 60 D.A.) 30000 incendiary bombs 500 phosphorous bombs.

350 destroyed250 severely damaged300 medium damage700 slightly damaged.

80 dead, 116 injured and 5600 homeless.

Damage was caused throughout the town area with particular emphasis on railway installations where very serious damage was caused at the Central Station and Shunting Stations and at Durlach Goods station as well as the Railway Repair Works and the Karlsruhe goods station. The East Gas Works and the Water Works were also badly damaged. The Police H.Q. and Siemens-Schuckert were also damaged.

/KARLSRUHE

#### RESTRICTED

G.3837/DOP/2/57/

KARLSRUHE	8 SEPTEMBER
8a 2341 - LGK VII	(USAAF)
. War Diary	
8a 2265 - Lfl.Kdo.3	
War Diary	••
CD. 325 - NSDAF H.Q.	
CD. 318 - NSDAP,	
Karlsruhe.	Bombs dropped:

Houses:

Casualties:

**- 54 -** and a

KARLSRUHE 26/27 SEPTEMBER CD. 325 - NSDAP H.Q. This raid was carried out from 0500 to 0520 hours by about 300 aircraft CD. 318 - NSDAP, through thick cloud. The Inner Town Karlsruhe and West were mainly affected. (80 30 mines Bombs dropped: 600 H.E. (50 duds) ) D.A.) 200000 incendiary bombs with explosive head, of which there were 1000 duds. 75000 incendiary bombs (700 duds) 100 phosphorous bombs. about 300 major, 450 medium and 6000 Fires: smaller fires. 1030 destroyed Houses: 1090 severely damaged 1250 medium damage 2000 slightly damaged. 30 dead, 535 injured and 21000 homeless. Casualties: Among the works which were severely damaged were: Argus works, Mauser works, Deutsche Waffen und Munitionsfabrik and the Heinrich & Hermann Metal Foundry. A gas works, the Central Station, 5 harbour installations and a bridge suffered severe to medium damage. The town hall, Ministry of the Interior and the County Court were destroyed as well as the Technical High School. It was estimated that the repairs to the Gas Works would take about 6 weeks. : Charles and KARLSRUHE 5 NOVEMBER CD.325 - NSDAP, H.Q. Between 400 and 500 aircraft attacked (USAAF) rail installations and a number of CD. 318 - NSDAP, districts of the town between 1126 Karlsruhe. and 1145 hours. 18 mines (2 duds and 15 D.A.) Bombs dropped: 1180 H.E. (160 duds) 78 destroyed Houses: 183 severely damaged 326 medium damage 599 slightly damaged. 37 dead, 56 injured, 28 under debris Casualties: and 2090 homeless. The Central Station and shunting station and the railway bridge at the Central Station were severely damaged and some damage was also caused to the permanent way near Durlach. Many /installations

RESTRICTED

G.3837/DOP/2/57/

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installations were destroyed and traffic in all directions was interrupted.

The Regional Post Office Administrative building sustained medium damage.

Details of this raid only apply to the Fieseler Aircraft Co's properties. The alarm was sounded at 1030 hours and five minutes later the first bombs fell on Bettenhausen and No.1 Works as well as the camp at Waldau. At 1032 hours No.2 and 3 Works were hit.

At least 300 H.E. " 77 petrol and phosphorous incendiary bombs (some duds)

99 dead and 192 injured.

The following translation gives details of damage caused to various buildings. In Building 24 (Work Preparation and Material Store) valuable machines and material were salvaged, likewise from Building 10 (moulding and model workshops.)

#### No. 1 Works

Fire-fighting proved very difficult, as water supplies (both in the works and in the emergency water tanks) had broken down completely and because nearly all the approach roads were blocked by bomb craters and rubble. The following damage was caused:

Degmaa

The 2 D D	Degree
Building No.	of Damage
Admin. Block	100%
24 (Work Preparation and	
Material Store)	100%
18 (Pressing Plant)	100,5
19 (Garage)	100,5
25 (Apprentices' Workshop)	100%
6 (Sick Bay)	70,0
9 (Wood Store)	75/0
10 (Moulding and Model Work	-
shop)	
11 (Store Shed)	100,6
14 (Wood Store)	75/5
15 (In the course of	80,3
erection)	
16 (Recreation room; being	
built)	100,5
21 (Trade Admin.)	Medium
22 (Construction & Admin.	
Depts.)	100%
27 (In the course of	•
erection)	70/5

KASSEL19 APRILFD. 3210/45 - Fieseler(USAAF)

Bombs dropped:

Casualties:

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/28

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Building No.

## Degree of Damage

60%

28 (Boiler-house) (Boiler-house chimney also damaged by H.E.s)

- 31 (Transformer Station) 41 ('Labor' Apprentices' School) -Medium
- 45 (Fire brigade garage, caretaker's house) Medium

Besides this, the concentrated bombing turned all the factory roadways and open spaces into an area of ruin and devestation. The water tank to the N.W. of Bldg. 22 was destroyed by a direct hit shortly before the end of the raid.

It has been calculated to date that 87 H.E.s (1,000 kg.) and 14 to 18 heavy incendiaries and phosphorous bombs were dropped.

#### No.2 Works

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No.1 Works received a telephone message from No.2 Works saying that bombs had fallen there at 10.32 hrs. After this the telephone line was cut.

A particularly heavy raid was carried out on No.2 Works. Most of the bombs dropped were 1,000 kg. H.Es, 63 of which fell within the factory premises. Within a further 200 metre radius, 94 more H.E.s have been counted and one 113 kg. petrol bomb (which failed to explode). About 17 heavy incendiaries and some phosphorous bombs were also dropped.

The following damage was caused:-

Building No.	Degree
Duriding NO.	of Damage
Hanger 51	Medium
Hanger 52	Medium
Hangar 53	Medium
Sick Bay	10055
64/65 (Admin. Bldgs.)	Heavy
Recreation room	Medium
80	100/2
81	100,0
82	100%
61	100%

Besides this, a large number of the approach roads were severely damaged by H.E.s and the entire water supply was destroyed.

/No.3 Works

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No.3 Works

A.R.P. hut

The attack on No.3 Works coincided with Here that on No.2 Works at 10.32 hrs. too, telephonic communications were cut after a few minutes.

The following damage was caused:-

Building No.	of Damage	
Hangar 101	Medium	
Hangar 102	Medium	
Hangar 103	Medium	
A.R.P. hut	Destroyed	

It has been estimated so far that 39 H.E.s (1,00 kg.) and 37 phosphorous bombs (14 kg., duds) were dropped on the factory premises. 

Lilienthalstrasse Settlement

During the heavy raid on No.1 Works, the foreign workers' settlement in the Lilienthalstrasse was also hit by 17 H.E.s and 3 or 4 petrol bombs (113 kg.).

#### Waldau Settlement

5 billets housing foreign workers in the Waldau Settlement were completely destroyed by 113 kg. petrol bombs. 3 more billets were slightly damaged by H.E.s which fell nearby. The main water supply system was destroyed. Nobody was killed.

Between 1110 and 1158 hours a heavy attack took place, carried out by about 500 aircraft in 3 waves at a height of 7000 -8500 metres. The areas most affected were the West bank (residential quarter), the inner town and the north sector.

1020 H.E. (23 duds) 12575 incendiary bombs 1071 oil bombs (113 duds)

114 destroyed 229 severely damaged 494 medium damage 2000 slightly damaged.

10 block fires, 65 major, 72 medium and 400 smaller fires.

/Casualties:

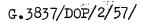
KIEL	
E.2879 -	Pol. Pres.
	Sit. Reps.
	Pol. Pres.
E.1322 -	Min. of Pub.
	Inf. & Prop.
CD.1268 ·	- Works ARP,
	Nordmark

JANUARY (USAAF)

Bombs dropped:

#### Houses:

Fires: · .



# - 58 - ...

#### Casualties:

KIEL As above and E.855 - Railway ARP.

5 JANUARY (USAAF)

Bombs dropped:

Fires:

Houses:

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Casualties:

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See report for raid on 5 January.

Numerous instances of damage to gas, water and electricity mains are reported. Considerable material damage was caused to the Deutsche Werke and fires were started in the firms of Anschuetz and Paulsen.

Numerous oil bombs fell on the firm of Hagenuk destroying K-workshops and A and K preparation workshops.

Krupp's works at the Germania Yards were also hit by H.E. and incendiary bombs damaging the material testing station and starting a fire in the acid and oil cellar.

The raid took place between 1039 and 1224 hours. It was a concentric attack by about 500 aircraft in 9 formations. It was a very severe raid, at least as severe as on the previous day. The first formations dropped incendiary bombs, the following waves dropping H.E. and oil bombs. Very heavy damage was caused to the whole town area, particularly the thickly populated residential quarter, and the shipyard and industrial installations. This affected the inner town neighbourhood of the station and Sophiemplatz.

1261 H.E. (26 duds) 9237 oil bombs (19 duds) 64300 incendiary bombs.

9 block, 112 major, 75 medium and 900 smaller fires.

151 destroyed 180 severely damaged 622 medium damage 3000 slightly damaged.

These figures are for the raids on 4 and 5 January combined:

241 dead, 481 injured and 22000 homeless.

The Central Station which was hit by 8 H.E. and 20 incendiary bombs was burnt out and traffic was dealt with at various other stations for about a fortnight. The Post Office and a prison as well as the North Harbour silo were hit.

/There

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There were 25 cases of damage to water, 50 to gasmains and 6 to electricity cables and supplies in most parts of the town were cut. Tram and bus services were suspended due to the blockage of roads and streets.

Fires occurred in the Deutschen Worken and the Germania Shipyards, where the ship-building and machinery works of Fried. Krupp were hit by 35 H.E. (3 duds), 5 oil and 300 incendiary bombs and several departments were destroyed. Many more were very heavily damaged, including stores for U-boat parts. The dock railway was also severely damaged.

KIEL E. 2391 - Pol. Pres.

22 MAY

Bombs dropped:

Houses:

Fires:

Casualties:

The alarm lasted from 1236 to 1325 hours when about 500 aircraft in 5 waves attacked the town from the NW and W. The areas mainly affected were the town centre and neighbouring districts in the north and west and the shipyards and war production industries and adjacent residential quarters.

1800 (7 duds) 125000 oil bombs (144 duds)

374 destroyed100 severely damaged113 medium damage336 slightly damaged.

225 major (including 20 block fires), 243 medium and 256 smaller fires.

95 dead, 227 injured and 6000 homeless.

Three premises occupied by the Navy were destroyed as well as 7 accommodation huts belonging to the Air Force. Several other military and police premises were damaged to a greater or lesser degree.

Damage to industrial properties were in the main medium to slight. Firms effected included Anschuetz A.G., Howaldt, Hagenuk and the Germania Yards.

Five aircraft were reported to have been shot down.

Between 200 and 300 aircraft carried out this raid in several waves and dropped their bombs in 14 minutes from 0944 to 0958 hours.

KTEL As above

6 JULY (USAAF)

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/bombs dropped:

# **- 60 -**

 $\infty f(x_{i}) = \pi (x_{i}) + \dots$ state and Bombs dropped: w States . . . .

> Houses: Fires:

23/24 JULY

800 H.E. (85 duds) 200 oil bombs (1 dud) 125000 incendiary bombs

404 destroyed 215 severely damaged 154 medium damage 500 slightly damaged.

168 major, 409 medium and 487 smaller fires.

Some damage was caused to military and police premises. The firms of Howaldt, Anschuetz and the Krupp Apprentices' Workshop were among the industrial concerns which suffered damage. Damage was also inflicted on transvay and railway installations.

At least 600 aircraft approaching from the north-northwest attacked in several waves between 0112 and 0139 hours. The Old Town, the town centre and adjacent districts in the west and north on the West bank and the shipyards and armament plants and neighbouring residential quarter on the East bank were mainly affected. Mines, H.E. and incendiary bombs (mainly H.E.) were dropped uninterruptedly. In its effect this was the heaviest H.E. raid to date. During the raid special aircraft were also mining the Kiel Fjord.

This heavy raid which was recognised by the Aircraft Reporting Service only a few minutes before the first bombs fell developed as follows:

Three formations each about 20 aircraft strong were reported during the period from 0030 hours till about 0100 hours as being in the following positions:

1	formation	in	Lauenburg-Rostock area
1	11	11	Flensburg Outer Fjord
1	11	11	the Outer Eider
			estuarv.

All 3 formations were reported as being made up of "nuisance" aircraft and bombers with bombs. At about 0103 hours the Air Raid Reporting Centre announced over the microphone: "The right wing of the northern formation has turned on to a SE course in the Flensburg Fjord. Single aircraft of this formation are in the Schlei Estuary, evidently for mining operations." The aircraft of the first formation which had been lost from the Rostock area were again

/located

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KIEL

As above and

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CD. 1268 - Works ARP, Nordmark

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located near Eutin at about 0101 hours and at 0104 hours were reported on a N course in the Kiel Outer Fjord, dropping "window". The third formation from the Eider Estuary were reported at 0107 hours over Kiel dropping red cascades and green Marker bombs. No aircraft, other than these three formations, were reported either over the North Sea nor on the west coast of Schleswig-Holstein.

Not until 0113 hours, that is 1 - 2 minutes after the first bombs fell, did the Kiel Air Raid Reporting Centre realise that a full-scale attack was about to take place. From then on uninterrupted penetrations were made for 35 minutes on a front Flensburg Fjord - Eckernfoerde Bight.

The reason for the main force of airoraft approaching from the North Sea not being reported may, according to the First Aircraft Reporting Department, have been that these aircraft escaped detection by flying due N at low level.

67 mines (3 duds)
over 8000 H.E. (1200 duds)
Some 1000 jet incendiary bombs
 " 2000 stick incendiary bombs
7 sea mines (a further large number
fell in the fjord).
Also a new kind of "window", leaflets
and ration cards.

The above figures are claimed to be too conservative rather than too high.

675 destroyed 516 severely damaged 458 medium damage some 10000 slightly damaged.

32 major, 13 medium and 19 smaller fires.

424 dead, 368 injured and 15000 homeless.

The District H.Q. of the Party was severely damaged and the main building of the University and the County Court were slightly damaged. Among the industrial concerns which sustained severe damage were: Deutsche Werke, Germania Shipyards, Anschuetz & Co. Howaldt Works, Artillery Stores Dept.,

/Naval

# Bombs dropped:

Houses:

Fires:

Casualties:

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Naval Arsenal. At Anschuetz & Co. a mine and 10 H.E. bombs destroyed the research workshops, No.1 Laboratory with the rubber department and practically all the administrative building with No.1 Design Office. The Krupp works at the Germania Shipyards in Kiel-Gaarden were put out of action by failure of the central power plant where a gasometer was destroyed. The armour-plating plant was also destroyed. The overground part of the Pries water works was also destroyed.

Gas supplies were cut off for 14 days and water for some days. 7000 main telephone connections were cut off.

A large number of vessels were sunk and harbour installations, vessels and floating docks were damaged. A total of 19657 gross register tons of shipping was lost through sinking or damage. The airfield at Kiel-Holtenau and the naval barracks at Kiel-Wik were severely damaged.

# <u>16/17 AUGUST</u>

This raid which was spread over the town of Kiel and some localities of the rural neighbourhood of Rendsburg was carried out by about 400 - 500 aircraft from 0002 to 0014 hours. Parts of Kiel which were more severely affected include the town centre and Wik on the West bank and the Germania Shipyards and neighbourhood of the East bank. A large number of the East bank. bombs dropped, which were intended for the armaments plants and residential quarters of Kiel, fell on communities surrounding Kiel, including Suchsdorf where  $\frac{3}{4}$  of the buildings were destroyed.

Bombs dropped:

96 mines (3 duds) 2 sea mines (both duds) 350 H.E. (49 duds of R.A.) 26000 incendiary bombs 330 phosphorous bombs 21 flares and marker bombs,

Houses:

82 destroyed 152 severely damaged 100 medium damage about 1000 slightly damaged.

Fires:

10 major, 46 medium and 80 smaller fires.

/Casualties

#### RESTRICTED

KIEL

E.2391 - Pol.Pres.

#### - 63 -

Casualties:

4 dead, 29 injured and 1500 homeless.

The casting department and drawing office of the Germania Shipyards were destroyed as was also the office building of the machine works of Hugo Witt.

The Wik Electricity Works was severely damaged by incendiary bombs, destroying 2 turbines and cutting production by 50%. A mine also wrought severe damage at the gas works at Wik, particularly in the generator house and to mains.

The main stores of Walter K.G. and the porter's lodge were also severely damaged by phosphorous and incendiary bombs. Medium damage was caused to the turret lathe dept. and engine test stands of the Deutsche Works and also to the Municipal Pumping station in the Humboldstrasse. The east side of the Central Station also sustained medium damage.

Some office and accommodation huts and the Engineers' Park were destroyed and severe damage was inflicted on the Staff Building of the Eichhof Barracks.

A heavy raid by about 1000 aircraft took place between 2300 and 2334 hours. The whole of the town area, including the Deutsche Works, Germania Shipyards, Naval Arsenal, Howaldt Works and surroundings, the district of Ellerbek, the Town Centre and northern sectors, were affected. In its effect the raid was the severest to date. All shipping lanes in the Kiel Bight were suspected of having been mined. The first bombs fell at 2300 hours.

300 mines (1 dud) 10000 H.E. (18 duds) 20000 phosphorous and jet incendiary bombs (80 duds) 700 oil bombs (9 duds) 80000 incendiary bombs (432 duds)

2201 destroyed 712 severely damaged 517 medium damage

1500 major, 1000 medium and 796 smaller fires.

/Casualties:

RESTRICTED

KIEL As above and CD. 1268 - Works ARP, Nordmark.

Houses:

Fires:

Bombs dropped:

26/27 AUGUST

#### - 64 -

Casualties:

125 dead, 929 injured (including about 600 who need treatment for their eyes as a result of the effects of smoke) and about 40000 homeless.

A large number of businesses, including several banks, hotels and wholesale provision merchants, were destroyed by fire.

Among the public buildings either destroyed or severely damaged were various Party Offices, the County Court, the main Post Office and a number of municipal offices.

At the Humboldt Works 20 buildings were a total loss and 10 suffered severe damage. There were 11 buildings of the Germania Shipyards which were destroyed by fire and numerous other buildings sustained severe or medium damage. The Naval Arsenal was severely damaged as was also the Deutsche Works. The Nautical Workshops in the Dammstrasse were destroyed and the Friedrich Krupp stores at the Germania Yards were severely damaged.

At the Wik Gas Works the offices and a gasometer were severely damaged and gas, water and electricity supplies failed completely. The tranway system throughout the town was also brought to a standstill through damage to cables and tracks. The telephone service was maintained by an emergency exchange, covering only about 600 subscribers.

In the harbour a large amount of shipping, mostly small vessels, were either sunk or suffered damage mainly from incendiary bombs.

The alarm lasted from 1504 hours until 1642 hours when about 250 aircraft attacked from the south in several waves. The first bombs fell at 1609 hours and those parts of the town mainly affected included Hassee, Wik, Gaarden-North and Neumuehlen.

Bombs dropped:

7 mines 1200 H.E. (11 duds) 85 phosphorous bombs 73 oil bombs 8000 incendiary bombs (434 duds)

/Houses:

30 AUGUST

(USAAF)

E. 2391 - Pol. Pres.

KIEI

G.3837/DOP/2/57/

#### - 65 -

Fires:

Houses: 41 severely damaged 49 medium damage 166 slightly damaged.

5 major, 31 medium and 91 smaller fires.

Casaulties: 7 dead, 14 injured and 436 homeless.

Little industrial damage was caused. A gasometer was destroyed by a H.E. bomb, three buildings of the Fine Mechanic Works were severely damaged by incendiary bombs and the long-distance telephone cable Hamburg - Kiel -Flensburg as well as a number of other local ones were destroyed.

The garage and workshops of the Army Transport park in the Hasseerstrasse were destroyed by H.E. bombs. Buildings in the barracks complex at Wik and the accommodation ship "St. Louis" suffered severe damage as a result of H.E. bombs.

15/16 SEPTEMBER

A "terror" raid was carried out by about 7 - 800 aircraft from 0106 hours when the first bombs fell until The alarm lasted from 0125 hours. 0020 - 0234 hours. The raiders came from the north in 12 waves. The communities of Moenkeberg, Kitzeberg and Heikendorf to the NE of the town were nearly wiped out. This was evidently an error as places lie up to a kilometre north of the shipyards. Bombs were scattered over the whole town area without any recognisable Mine-laying operations in target. Outer Kiel Fjord, Eckernfoerde Bight and the island of Alsen areas preceded the raid.

Bombs dropped: About 150 mines about 800 H.E. (15 duds or D.A.) about 20000 incendiary bombs (836 duds)

Houses: 193 destroyed 168 severely damaged 177 medium damage 346 slightly damaged.

#### Fires:

Casualties: 10 dead, 13 injured and 1700 homeless.

A total loss of some installations including a steam crane is reported at the Howaldt works and the material

2 major, 97 medium and 85 smaller fires

RESTRICTED

KIEL As above

j

/stores

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stores at the Naval Arsenal were destroyed. At the Deutsche Works 5 buildings and Slipway 3 were severely damaged. Considerable damage was inflicted on gas, water and electricity supplies, a gasometer at Gaarden being badly damaged. The tramways stopped running due to damage to the overhead cables and tracks.

In the harbour the steamer "Mexfall" was hit amidships by a H.E. bomb, was burnt out and sank. The tanker "Gabelsflach" was severely damaged by fire.

A Flak site was severely damaged by a mine and incendiary and H.E. bombs destroyed a naval stores.

Telephone connections were destroyed in the East sector by the first bombs, causing delay in reporting and fire fighting.

Two waves, each of about 30 aircraft, attacked between 1145 and 1215 hours from the south. The town was not hit and the raid was directed against the airfield.

Bombs dropped: 200 - 300 H.E.

40 dead and 70 injured

Accommodation huts, workshops and the hangars were hit and in the main destroyed or severely damaged. Numerous craters appeared in the runways and the railway line to St. Veit was cut by several direct hits.

About 240 to 300 aircraft attacked from a height of about 6000 - 8000 metres. The town centre, Oberwerth, Metternich and Luetzel were mainly hit.

Bombs dropped: 2 - 3000 H.E. (25 duds) 150000 incendiary bombs 1 - 2000 oil bombs.

Fires: Area and major fires occurred in the town centre, Goldgrube and Luetzel.

Houses: Several hundred houses were destroyed by fire and several hundred more suffered severe or medium damage.

/Casualties:

RESTRICTED

KLAGENFURT

E. 1322 - Min. of Pub. Inf. & Prop. <u>31 JANUARY</u> (USAAF)

Casualties:

9 OCTOBER

(USAAF)

KOBLENZ

E. 970 - LGK. XIV

G•3837/DOP/2/57/

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Casualties: 20 dead, and 80 - 100 unrecovered.

150000 incendiary bombs

5 - 600 severely damaged.

Large fires were started.

60 dead, 585 injured, 60 missing

The

6 - 800 destroyed

and 25000 homeless.

The Police H.Q. and the Town Hall were severely damaged. The railway line Bingebrueck - Koblenz was blocked by 12 craters south of Koblenz. Single line traffic was resumed after 48 hours.

About 150 - 200 aircraft carried out a heavy terror raid. Transport installations were the chief target.

Bombs dropped: 200 mines 1000 H.E.

6/7 NOVEMBER

Houses:

Casualties:

KOBLENZ As above

LEUNA

E. 2606 - Min. of Arm. & War Prod. FD.4372/45 - I.G. Farben Damage Returns FD.3353/45 - Speer. Vol. 110 The following is a translation of the salient points from a document  $(\Xi.2606)$  dated 10 October.

Central Station and a railway bridge on the line to Cologne were destroyed. The Gas Works were also destroyed.

# "Air Attacks on the Leuna Works (incl. Dapsig Water Works)

1.	No. of attacking aircra	ft Of which over the Works
	Raid on 12.5. 250	250
	<b>" "</b> 28,5 200	40
	" " 7.7. 250	55
	" " 20.7. 200	105
	" " 28 <b>.</b> 7 500	300
	<b>" "</b> 29.7. 700	150
	" " 24.8 260	250
	" " 11.9. 250	80
	" " 13.9. 250	100
	Total: 2860	1330
2.	Bombs dropped on Works	and immediate neighbourhood.
	Raid on 12.5.	3500) 1300)

Raid	on	12.5.		3500)	
tt	Ħ	28.5.		1300)	
n	11	7.7.		2000)	All
tt	11	20.7.		1500.)	
11	n	28.7.		6000)	H.E.
11	11	29.7.		5000)	
11	tt	24.8.		1200)	bombs.
11	tt	11.9.		1000)	
11	n	13.9.		1300 )	
			Total:	22800	
					/\\\

RESTRICTED

/No.3

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3. No. of bomb hits scored on Works

	1500
20.5.	600
7.7.	600
20.1.	600
28.7.	900
29.7.	700
24.8.	580
11.9.	75
13.9.	300
	20.7. 28.7. 29.7. 24.8. 11.9.

Total:5855

## 4. Area of Works damaged.

Destroyed	21600	sq.	metres
severely damaged	45600	jî.	11
medium damage	59600	11	H
slightly damaged	209600	0	**
Total:	336400	- 11	18

As far as has been ascertained up till now, no incendiary bombs have been dropped in the raids on the Leuna Works.

The following table is taken from a document issued by I.G. Farben and gives added detail concerning raids mentioned above and continues to the end of the year.

Date	<u>Damage in</u> 1000 - R.M.	Damage to plant etc.
12.5.	45.800	Effect severe: The works are not operating. Hits scored on nitrogen and methanol plants. Workshops severely damaged. Fires in power gas and sulphur stores. Severe destruction to pipe lines and streets. 117 dead and 270 injured.
28,5	9.900	Effect severe: The works are not operating.
29.5.		Effect slight.
7.7.	5.900	The works had to close down due to pipe damage. Overall damage less than from the raids of May.
20.7.	14.100	Works installations damaged.
28/29.7	66.300	Works installations damaged.
24.8.	16.900	Effect medium. Date of resumption uncertain.
11.13.9.	13.100	Effect medium. Date of resumption uncertain.
28.9 7.10.	3.200	Effect medium.
RESTR	ICTED	/Works

G.3837/DOP/2/57/

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Date	<u>Damage in</u> 1000 - R.M.	Damage to plant etc.
2.11.	100	Works installations damaged.
8.11.	20	Works installations damaged.
21.11.	8,300	Severe damages. 800 - 1000 aircraft
25.11	5.100	Severe damage.
30.11.	6.200	Medium to severe damage 6 - 700 aircraft.
6.12		Severe damage.
12.12.		Probably little damage
16.12		Severe damage

Note: In a report from Speer to Hitler on the synthetic fuel situation, dated 18.1.45 the following statement appears: "In spite of strong Flak protection Leuna has been hit severely several times. On no such occasion was fighter protection so effective as to be able to ward off the enemy attacks."

LEVERKUSEN FD.4372/45 - I.G. Farben Damage Returns

26 OCTOBER

At midday the heaviest raid to date was made from the north and affected, apart from Leverkusen itself and the I.G. Farben Works, also Rheindorf and Kueppersteg-Wiesdorf. Three carpets of bombs fell between 1530 and 1537 hours on the I.G. Farben Works alone, consisting of 12 mines, 150 H.E. and about 1500 incendiary bombs. In Wiesdorf, by midday 27 October, 75 dead had been counted but this was not a final figure as a large number were still buried under the debris. In the works 10 dead and 24 injured were reported.

A large number of fires were caused, of which 13 were large and 8 medium and 9 plants in the works were destroyed. The northern half of the works was mainly damaged, although throughout the factory damage was caused to windows and roofs. The power production plants were considerably affected. The coal unloading plant was put out of action due to failure of current after the destruction of the Damage to the coal switch gear. pulverisation plant caused the Y Power Plant to be out of action for 5 months. Various other power plants (transformers) were also damaged.

/Repairs

- 70 -

Repairs to pipe bridges (power distributors) (at least 500 metres destroyed or damaged) were estimated to take at least 10000 hours. At least 40 - 50 major fractures in steam and air conduits would take some 5000 - 6000 hours to repair and repairs to 50 instances of major damage to underground gas and water mains would take up to 12000 hours. The telephone exchange received direct hits and damage caused disrupted both internal and outside connections and would take 5 months to put right. In the Inorganic Department the chlorine and hydrogen plants received direct hits. The vanadium plant in Building S.5 was completely destroyed and would remain so for the duration of the war. Τn A-Factory some 19 buildings were destroyed or damaged. The total value of damage caused here is estimated at 10.8 million Reichsmark. At the quayside 2 laden ships were sunk and quay and crane installations were destroyed or damaged.

The raid was carried out by about 300 to 350 aircraft and is termed a heavy one. The districts of Mundenheim. Gartenstadt and Oppau, where a large number of fires were started, and the town centre were mainly affected.

Bombs dropped: 705 H.E.

50000 incendiary bombs 4000 oil bombs

92 destroyed 204 severely damaged 1087 slightly damaged.

fires.

Fires:

Houses:

Casualties:

7 JANUARY

(USAAF)

LUDWIGSHAFEN 27 MAY 8a 2341 - LGK VII (USAAF) War Diary FD.4372/45 - I.G. Farben Damage Returns 34 dead, 22 injured and 3000 homeless.

12 large, 69 medium and 288 smaller

I.G. Farben in Oppau was hit by about 100 H.E. bombs and the works were severely damaged. Production was reduced also by a power failure. Railway installations and buildings were also damaged to some extent. The Railway Inspectorate buildings was destroyed and a number of lines were temporarily closed. Railway telephone lines were also destroyed.

Part of the force which attacked transport installations in Mannheim dropped a carpet of bombs on Ludwigshafen causing damage to industrial installations, including Raschig

G.3837/DOP/2/57/

RESTRICTED

/& Co.,

LUDWIGSHAFEN E.1322 - Min. of Pub. Inf. & Prop. E. 855 - Railway ARP. - 71 -

& Co., chemical works, the machine factory of Gruenzweig & Hartmann and the chemical factory of Knoll A.G. In all 1320 H.E. and 50 oil bombs were dropped, killing 31, injuring 33 and rendering 2150 homeless. A direct hit was scored on a gasometer at the Ludwigshafen works of I.G. Farben.

This raid also covered Mannheim and details given below refer to both Ludwigshafen and Mannheim. About 400 aircraft took part and the harbour area, Lindenhof, the town centre, the north and Neckarau were the districts mainly affected.

4650 H.E. 6000 incendiary bombs 2630 oil bombs

83 dead, 103 injured and 5500 homeless.

Heavy damage was reported in the neighbourhood of the Central Station, at the Shunting Station, I.G. Farben and the Giulini Chemical Works in Ludwigshafen and at the Schiffs-und Maschinbau A.G., Voegele Machine Works and Heinrich Lanz A.G. in Mannheim.

At the I.G. Farben works in Ludwigshafen 19 production buildings, 1 office building, 1 laboratory, 2 stores and 7 accommodation huts were destroyed or damaged as a result of 32 fires and numerous hits by H.E. bombs.

About 300 bombers with fighter support entered the Luftgau between 1048 and 1210 hours, half of them flying on to the Mannheim-Ludwigshafen area. Details of that part of the raid affecting Mannheim are incorporated below.

2 mines 800 H.E. 80000 incendiary bombs and 1000 with explosive head 200 oil and jet incendiary bombs On 4 decoy sites 374 H.E. and 12050 incendiary bombs were dropped and in Precinct 8 some 250 H.E. and 800 -1000 incendiary bombs.

In Precinct 8 there were 30 medium and 100 smaller fires.

/Houses:

## .

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<u>LUDWIGSHAFEN</u> 8a 2341 - LGK VII

IGK VII (USAAF) War Diary

31 JULY

Bombs dropped:

Casualties:

LUDWIGSHAFEN <u>3 SEPTEMBER</u> 8a 2341 - LGK VII (USAAF) War Diary E. 866 - ARP Precinct.8 CD.326 - NSDAP H.Q.

Bombs dropped:

Fires:

G. 3837/DOP/2/57/

## - 72 -

Houses:

150 destroyed 450 - 500 severe to medium damage 500 slightly damaged.

Casualties:

64 dead, 71 injured and 5100 homeless.

In Mannheim the Motorenwerke and the Spiegel-glasfabrik suffered medium Severe damage was caused to damage. the permanent way and railway buildings and a number of lines were blocked. Numerous instances of damage to gas and water mains and overground cables occurred. Several fires broke out in the Ludwigshafen works of I.G. Farben which were all put out by their own staff. Fires were also started in the Walzmuehlen A.G.

The following figures of houses damaged apply to Precinct 8 only:

> 33 destroyed 40 severely damaged 60 medium damage 250 slightly damaged.

A force of some 800 - 900 bombers with fighter escort penetrated from

LUDWIGSHAFEN	8 SEPTEMBER
8a 2341 - IGK VII	(USAAF)
War Diary.	
8a 2265 - Ifl.Kdo.3	
War Diary.	
CD. 326 - NSDAP H.Q.	
FD. 4372/45 - I.G. Fai	
Damage H	Returns
	, ·

Bombs dropped: 21 A.

Casualties:

Houses:

1054 to 1138 hours in 2 groups, about 500 of which attacked the Ludwigshafen area, including Mannheim.

More than 1100 H.E. (of which at least 15 were D.A.) 8 - 10000 incendiary bombs.

Mannheim only: 6 destroyed 7 severely damaged 14 medium damage 34 slightly damaged.

155 dead, 128 injured and 1300 homeless.

On Mannheim 500 H.E. (15 D.A.) were reported. These caused, inter alia, the destruction of 3 tanks each containing 4000 litres of tractor fuel, 1 tank of 40000 litres of diesel and 1 tank of 40000 litres of anti-freeze. The

/Boeringer

Boeringer Chemical Works suffered a 50% loss in production and the Mannheim Zellstoffabrik a temporary loss of 100%.

At the Ludwigshafen I.G. Farben plant the heaviest raid to date took place when 1000 H.E. bombs fell on the works which were paralysed for weeks. The Poly-styrol plant was completely destroyed and 50 people were killed. At the Oppau works 40 H.E. bombs started 3 large and 20 other fires. In the harbour 3 ships were destroyed and 15 suffered damage and 2 harbour installations were badly hit.

At about 1207 hours a medium heavy raid took place in which Friesenheim and the northern part of the town were hit. At about 1330 hours Mannheim was also raided.

650 H.E. 25000 incendiary bombs 50 oil bombs.

Fires:

25 SEPTEMBER

Bombs dropped:

(USAAF)

Damage Returns

Houses:

10 major, 22 medium and 220 smaller fires.

In Mannheim:

severely damaged
 medium damage
 slightly damaged.

40 H.E. and 20 incendiary bombs fell on the Ludwigshafen I.G. Farben works and a direct hit was scored on the electricity The works were power installations. already at a standstill. The Rhein bridge was damaged on the Mannheim side. Halbert Machine Works suffered severe damage from a direct hit in the diesel All workshops of the department. Jakob Schweyer Aircraft works were In Mannheim only medium to wrecked. slight damage was caused to some industrial plants and 8 ships were destroyed and 2 severely damaged.

/LUDWIGSHAFEN

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G.3837/DOP/2/57/

LUDWIGSHAFEN

E. 970 - IGK XIV

FD. 4372/45 - I.G. Farben

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# LUDWIGSHAFEN

E. 970 - LGK XIV

This raid was at 1249 hours and is It affected referred to as a heavy one. the Mundenheim, North and Oppau districts.

3000 H.E. Bombs dropped: 41000 incendiary bombs 200 oil bombs.

8 major, 78 medium and 245 smaller fires.

Fires:

Houses:

64 severely damaged 268 medium damage 675 slightly damaged.

The I.G. Farben works in Ludwigshafen and Oppau as well as Dr. Raschig Chemical works sustained medium damage.

Traffic on the railway line to Mannheim was restricted to single line for some time. Electricity and water supplies in various districts were interrupted.

On 5 decoy sites 301 H.E. and 17200 incendiary bombs were dropped.

From 1106 to 1150 hours about 400 aircraft continuously bombed mainly Ludwigshafen but also Mannheim. In Ludwigshafen the I.G. Farben plant on which 85 H.E. and 5 incendiary bombs were dropped and 4 other industrial works suffered medium damage and a chlorine container was hit. On railway property 35 H.E. bombs caused damage and traffic at the Central Station and at the Shunting Station was suspended. Heavy damage by H.E. bombs was caused in Mundenheim.

In Mannheim mainly the inner town, Heckarstadt and the industrial district were hit. Medium damage was done by 100 H.E. and 10 incendiary bombs to the Oppau works of I.G. Farben.

Between 1900 and 0030 hours about 250-300 aircraft penetrated into Germany from Holland and the North Sea. About 30 - 40 are estimated to have been shot down. A medium raid developed and in the northern, southeastern and southern sectors of the town fires were started, Buckau, Salbke and Krakau being the districts most affected.

/Bombs dropped:

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LUDWIGSHAFEN E. 970 - IGK XIV FD.4372/45 I.G. Farben Damage Returns

MAGDEBURG ٠, 21/22 JANUARY E.1322 - Min. of Pub. Inf. & Prop. 8a 1315 - No.48 (mot) ARP Unit War Diary.

5 NOVEMBER (USAAF)

94 destroyed

19 OCTOBER (USAAF)

75 -

Bombs dropped:

Fires:

Houses:

Casualties:

7 mines 266 H.E. 5000 incendiary bombs 59 oil bombs 20 flares.

27 major, 38 medium and 281 smaller fires.

10 destroyed 94 severely damaged 238 medium damage.

163 dead, 417 injured and 1050 homeless.

The Krupp-Gruson Works were completely destroyed and the railway repair works severely damaged. In the Buckau industrial quarter Scheffler & Budenberg and the Wolf Machine Works suffered rather severe damage as did also the firm of Wolf-Salbke. The Lignose-Schoenbeck Fuel Works were still burning at 0300 hours, at which time there were still heavy explosions.

Between 250 and 350 of the force which penetrated (see introductory comments on the Ludwigshafen raid on this date) carried out a heavy attack on railway installations with bridges as main targets in the Mainz area. No actual numbers of bombs dropped are given but several carpets of bombs fell on the district of Kastell where damage was done to the permanent way at the station, which was itself destroyed as was also the Army Ordnance Depot. A wood store belonging to Messerschmitt was also burnt out and fires occurred at the Mainz-Kostheim Zellstoff A.G. No Rhein bridges were hit. One military train near Kostheim was hit and also a rail bridge over the Main.

154 dead, 148 injured and 7600 homeless.

For information concerning damage to houses, please see the last paragraph of the report of the raid on Mainz on 9 September.

A medium heavy attack was carried out by some 300 of the 600 - 700 aircraft (bombers and fighters) which entered the LGK area between 0953 and 1205 hours. No details of bombs dropped are available nor of houses damaged in this raid but casualties are given as 94 dead, 152 injured and 70 missing. Damage is

/reported

MAINZ 8a 2341 - IGK VII War Diary. 8a 2265 - Lfl.Kdo.3 War Diary.

(USAAF)

8 SEPTEMBER

Casualties:

MAINZ As above and

E. 730 - Reg.Econ. Office, Weisbaden. 9 SEPTEMBER (USAAF)

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reported to a rail and road bridge over the Rhein but traffic was not affected. Rail traffic on the Frankfurt - Kastell line was interrupted and the firm of Elster & Co. was severely damaged.

In a brief report dated two months after this raid the damage caused to houses and the number of homeless as a result of this and the raid on 8 September are given as:

> 540 destroyed 92 severely damaged 244 medium damage 2144 slightly damaged, and 12250 homeless.

Between 1414 and 1438 hours some 300 -400 bombers entered the LGK area, some of which carried out a medium heavy attack on the Mainz. No record is available of the numbers and types of bombs dropped or of casualties. The number of houses destroyed or damaged is given as follows:

359 destroyed198 severely damaged253 medium damage840 slightly damaged.

The number of homeless is given as 3500.

Between 1130 and 1433 hours about 1200 bombers (Fortresses and Liberators) with an escort of about 500 - 700 Lightnings, Thunderbolts and Mustangs entered the LGK area. Of these a number made a heavy raid dropping 7 bomb carpets and hitting in particular the Old Town and the suburbs of Weisenau, Kastell and Gustavsburg.

Bombs dropped: 785 H.E. 14400 incendiary bombs

Fires:

Houses: .

. . . .

SEPTEMBER

(USAAF)

19 OCTOBER

(USAAF)

Casualties:

58 oil bombs.

75 major, 133 medium and 247 smaller fires.

116 destroyed

182 severely damaged 250 medium damage

547 slightly damaged.

73 dead, 75 injured, 28 unrecovered and 1100 homeless.

Of 13 industrial concerns hit 3 were destroyed and 3 seriously damaged. Damage to 8 military installations

/included

MAINZ

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8a 2341

- LGK VII

730 - Reg.Econ.

970 - IGK XIV

Office.

Wiesbaden.

E. 730 - Reg.Econ.

War Diary

Office,

Wiesbaden.

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included 5 destroyed. The MAN works in Gustavsburg was hit but only slightly damaged.

MAINZ E. 970 - LGK XIV

18 DECEMBER (USAAF)

Bombs dropped:

Houses:

Fires:

Casualties:

In five minutes from 1351 hours four carpets of bombs were dropped on Mainz and the suburbs of Mombach and Gonsenheim.

400 H.E. 20 phosphorous bombs 500 incendiary bombs.

75 destroyed 30 severely damaged 50 medium damage 110 slightly damaged.

5 major fires.

30 dead, 150 homeless and of 50 buried 36 were recovered.

At Rhenania-Ossag a tank was set on fire and 390000 litres of petrol were destroyed. There was a lack of foam extinguishers. Considerable damage by fire was caused to most of the works of Westwaggon and 3 machine works were also severely damaged. The Mainz-Wiesbaden Power Station was damaged and 3 H.E. bombs fell on each of the electricity and gas works. The Alice Barracks were hit by 30 H.E. and a number of other barracks and military installations were damaged.

This heavy raid was carried out by about 500 aircraft between 1215 and 1258 hours from 6000 to 7000 metres. The areas mainly affected were the industrial district of Kaefertal, the inner town and Friedrichspark. The airfield at Sonthofen was also the object of Eight aircraft are reported attention. as shot down.

2000 H.E. (15 duds) 18000 incendiary bombs 200 oil bombs.

21 major, 500 medium and 100 smaller fires.

24 dead, 36 injured and 3500 homeless.

150 destroyed 100 severely damaged 200 medium damage 300 slightly damaged.

Casualties:

/Brown.

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G.3837/DOP/2/57/

MANNHEIM

AUGUST (USAAF)

Bombs dropped:

Fires:

Houses:

CD. 326 - NSDAP H.Q.

1 mine

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Brown, Bovery & Co. was very severely damaged so that production ceased altogether. Six other firms were severely damaged and 5 slightly.

The airfield was very badly hit by several carpets of bombs and two ships in the harbour were sunk.

No special target was discernible in this very heavy raid as carpets of bombs were distributed over the whole town area. Approximately 500 aircraft took part and the raid lasted from 1020 to 1140 hours.

8 dead, 32 injured and about 5000 homeless.

Bombs dropped:

SEPTEMBER

(USAAF)

Houses:

Casualties:

Industrial:

2 destroyed 6 severely damaged 6 medium damage 13 slightly damaged.

about 3000 H.E. (29 duds) about 60000 incendiary bombs

about 500 oil bombs

61 severely damaged 87 medium damage 305 slightly damaged.

68 destroyed

The two works destroyed were Friedrich Magler and Kessel & Wolf. Among the severely damaged were Daimler-Penz and the Suedkabel works. One electricity . and one gas works was severely damaged, resulting in the town being without light for the time being and completely without gas. Telephone services and water supplies were also partially interrupted. Railway installations were also affected, disrupting traffic.

The whole town area, particularly Neckarau, the inner town near the castle and station, the industrial quarter and the north sector was hit by a heavy raid. It is estimated that about 1500 aircraft took part and the raid itself lasted from 1259 to 1401 hours.

Bombs dropped:

19 OCTOBER

(USAAF)

2 mines 🧠 2600 H.E. (30 duds) 160000 incendiary bombs (1200 duds) 10000 incendiary bombs with explosive

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head (100 duds) 100 phosphorous bombs

/Fires:

G.3837/DOP/2/57/

#### MANNHEIM CD. 326 NSDAP

CD. 325 ) H.Q.

MANNHEIM E. 852 - Chamber of Commerce. E. 970 - LGK XIV CD.326 - NSDAP H.Q.

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## Fires:

Houses:

## Casualties:

75 major, 101 medium and 354 smaller fires.

217 destroyed 165 severely damaged 276 medium damage 991 slightly damaged 2780 glass only

105 dead, 143 injured, 93 missing and 9600 homeless.

The VDM Suedkabel works in Neckarau received 4 direct hits (H.E.) and about 100 incendiary bombs. Damage resulted in 100% loss of production for 1 week and 50% for another week. Structural damage was estimated at 120000 RM. and damage to machinery at 30000 RM. Two H.E. and innumerable incendiary bombs fell on the Lutzenberg works and totally destroyed the field cable testing plant and the post office and army acceptance department. A number of other firms including Heinrich Lanz A.G., Daimler-Benz, Schiffs-und Maschinenbau A.G., Brown, Boveri and Strebelwerke were hit but in the main only medium to slight damage was caused. Some damage was also caused to the permanent way at the Goods Station and marshalling yard and the line to Frankfurt was cut at several points and traffic stopped. The electricity company near Neckarstadt station suffered damage. Gas supplies were cut for 2 - 3 months. The Police H.Q. and the Searchlight barracks were severely damaged. A Flak emplacement received a direct hit.

About 500 aircraft participated in this raid on the harbour and industrial districts between 1106 and 1142 hours.

2 mines 10 - 12000 H.E.

56 destroyed 65 medium damage 235 slightly damaged.

8 dead, 19 injured, 40 missing and 2500 homeless.

Damage was comparatively slight. One industrial concern was severely damaged and a chlorine tank at the firm of Raschig was hit causing the gas to escape. Some damage was also caused to rail and harbour installations. There was also a temporary light failure.

/MANNHEIM

MANNHEIM CD. 325 - NSDAP H.Q. 5 NOVEMBER (USAAF)

Bombs dropped:

Houses:

Casualties:

#### - 80 -

#### MANNHEIM 15/16 DECEMBER

E. 970 - LGK XIV

Mannheim was attacked by about 275 aircraft from 1825 to 1845 hours. The areas most severely hit were the harbour area and railway installations. The industrial quarter was also affected.

Bombs dropped:

15 mines 1200 H.E. 2000 incendiary bombs.

Houses:

Casualties:

18 MARCH

(USAAF)

35 destroyed 62 severely damaged 72 medium damage 246 slightly damaged.

4 dead, 17 injured and 1200 homeless.

Brown, Boveri suffered 100/2 and both the Riedinger Machine Factory and the Verein deutscher Oelfabriken 60/2. Strebelwerk I and the Mannheimer Shipyards each suffered 50%. In the Neckarau Shunting station 4 waggons of anti-tank ammunition were destroyed. Ludwigshafen at the same time had a medium attack in which the I.G. Farben works in Oppau suffered considerable damage.

This raid was described as a medium terror raid, the town centre as far as the East Station being most severely At 1203 hours 210 enemy airaffected. craft with strong fighter escort were reported in the Amiens area heading southeast. The alarm in Munich was sounded at 1343 hours and the raid in which 150 -200 aircraft are reported to have taken. part began at 1440 hours. The end of the attack is given as 1456 hours and the all clear at 1546 hours. The actual target was evidently the Dornier Works and airfield at Ober pfaffenhofen and the attack was made from between 4000 and 7000 metres with some aircraft at between 1500 Recognised types were and 3500 metres. Fortress II, Thunderbolt and Lightning.

Bombs dropped:	10 mines 339 H.E. (250 Kg.) (19 duds) 805 oil bombs (45 kg.) (30 duds) 1000 phosphorous bombs (4 duds) 12000 incendiary bombs (1000 duds)
Fires:	11 major, 24 medium and 14 smaller fires.
Casualties:	172 dead, 296 injured and 3200 homeless.
Buildings:	103 destroyed (90. by H.E. 13 by fire) 90 severely damaged (81 by H.E. 9 by fire)

/145 medium

MUNTCH

E. 1043 - Pol. Pres.

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145 medium damage (111 by H.E. 34 by fire) 187 slightly damaged (135 by H.E. 53 by fire)

At the Dornier Works at Ober pfaffenhofen 180 H.E. and 6 - 800 incendiary (oil) bombs fell on the workshops and runway of the airfield. One workshop was \_ partially destroyed, one sustained medium damage and two were slightly damaged. Various other buildings and stores were destroyed or damaged, mainly by fire. Two DO 217 were destroyed and two more The Dornier Works in Munich damaged. Nine aircraft also suffered some damage. were destroyed and 45 slightly damaged. Three hangars sustained 40% damage and 3 others slight damage and there were 13 hits scored on the runway and several on . the taxying area.

Five other factories were hit but no serious damage was caused.

A number of military properties were hit, causing in the main medium damage and some Police, railway and post casualties. There office buildings were also hit. was some interruption to telephone and teleprinter communications and rolling stock and buildings as well as the permanent way of the railway were destroyed and damaged causing a number of lines to be temporarily closed. The Police H.Q. was among the police buildings severely damaged.

The Flak expended the following rounds of ammunition:

15	-	12.8 cm
869		10.5 cm
5154	-	8.8 cm

At the same time the airfields at Lechfeld, Memmingen and Landsberg were also attacked. At Lechfeld a few hundred H.E. mixed with incendiary bombs The Command Post was were dropped. partially destroyed by a direct hit and damage by fire was caused in 2 accommodation houses, the Officers' Mess and 3 Casualties amounted Officers' quarters. to 27 dead and 25 injured and 8 machines were destroyed and 25 slightly damaged.

The Memmingen airfield was attacked at 1430 and 1446 hours by 2 waves each of Slight damage was 5 - 60 aircraft. caused in Nos. 1, 2 and 4 hangars, the transport hangar sustained medium damage.

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The material stores and a fire fighting appliance were severely damaged. Slight damage was caused to the taxying area. Casualties were 32 dead and 43 injured. Damage to aircraft amounted to 1 Me 110 100%, 1 Me 110 50% and 25 other aircraft 3% to 20%.

-7

At Landsberg airfield 50 heavy and 100 small bombs were dropped at 1414 hours slightly injuring 11 people. One house was severely damaged, 5 building slightly 1 hangar with annex medium and 2 hangars and workshop slightly. 8 aircraft sustained 50 - 100% damage and 5 more 5 - 30%.

The alarm was sounded at 0059 hours and lasted until the all clear at 0253 hours. During this time bombs were dropped for 26 minutes from 0144 to 0210 hours. According to Flak estimates between 350 and 400 aircraft in formations of 50 - 70 made up the raiding force of which 13 were shot down by Flak in the Munich area.

7 - 2000 kg. H.E. 24 - 500 kg. " 54 - 250 kg. " (7 duds) 844 oil bombs (20 duds) 550000 incendiary bombs (6932 duds) 14160 jet incendiary bombs (2784 duds) 459 photoflashes (28 duds) 36 marker bombs.

Apart from service or party fire brigades the municipal brigades, assisted by brigades from Nuremberg and other localities fought 1470 fires. The Army attended to 260 outbreaks in their own and private properties and squads from the NSDAP were called to 1128 fires.

1104 destroyed

614 severely damaged

753 medium damage

810 slightly damaged.

136 dead, 4185 injured and 70000 homeless.

Of 285 military buildings damaged 49 were destroyed and 58 severely damaged. Among those buildings affected were: Gestapo (severe), Reichsbank (severe), Police H.Q. (medium), IGK and a number of party and local government buildings and banks, churches, schools and hotels. The telephone exchange was put out of action and an emergency switchboard dealt with about 25% of the traffic. No serious damage was reported to any industrial concerns of importance.

# Bombs dropped:

24/25 APRIL

#### Fires:

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Houses:

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Casualties:

## G.3837/DOP/2/57/

MUNICH

E. 1043 - Pol. Pres.

War Diary.

8a 2341 - LGK VII

RESTRICTED

/Comment:

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Comment: For the first time on Munich a new type of 13 kg. liquid (oil) bomb was used.

Fourteen were bundled together and on release from each other floated down on an asbestos parachute. The contents, similar to benzin (petrol), was ignited by a thermite charge and threw a jet of flame 3 - 4 metres long. The heat and smoke generated rendered it far more difficult to combat. It could be extinguished by water and sand and even by a jet of water.

The alarm sounded at 0922 hours when a force of 4 - 500 aircraft in several waves of 30 - 80 aircraft approached. The force came from the Adriatic via Istria, Bad Gastein, Salzburg, Chiemsee, Muehldorf, Dingolfing, Landau/Isar, Plattling, Regensburg, Ingolstadt and Pfaffenhofen attacking the northern areas of the city from the NW, N & N.E. The target was railway communications and installations. The first bombs fell at 1009 and the all clear was sounded at 1102 hours.

1192 H.E. (33 duds) 325 fragmentation bombs (42 duds) 247 American oil bombs

92 destroyed 129 severely damaged 139 medium damage 427 slightly damaged.

147 dead, 107 injured and 5000 homeless.

Three factories were damaged, one severely, and two electricity works sustained severe damage.

With one exception all lines to and from the Central Station were put out of action. Also with one exception the same applied to the East Station. In both cases the damage was not of long duration. The North Ring railway which during recent years had been extended for military use was the worst hit, the Foehringer bridge being holed.

In addition 60 communities were attacked and an almost equal weight of bombs to that dropped on Munich itself, namely:

1060 H.E.

275 fragmentation bombs 200 oil bombs

were dropped, causing 21 deaths and injuring 33. The German radar system was effectively jammed.

MUNICH As above

9 JUNE (USAAF)

## Bombs dropped:

Casualties:

RESTRICTED

/Comment:

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Comment: With reference to the attack being launched from the north, the "This not only comment is made: served as a deception but, in view of the fact that the south and central districts had already been heavily hit and the enemy was consequently only still interested in northern districts, he did not need to expose himself to other Flak defences than those in the north."

Several hundred bombers with fighter cover penetrated between Kitzbuehl Alps and Salzburg from 0910 hours until 0952 hours. The alert lasted from 0917 until 1102 hours, the first bombs falling at 1009 hours. The number of aircraft engaged was 5 - 600. The main residential areas hit were Milbertshofen, Schwabing, Westend, Pasing, Berg a/Laim, Bogenhausen and Recognised types included Freimann. Liberators, Fortresses, Lightnings and Eight aircraft are reported Mustangs. shot down as well as 3 possibles.

3021 H.E. (71 duds) 258 fragmentation bombs (21 duds) 1009 oîl bombs (132 duds) a further 1000 H.E. were dropped on the surrounding neighbourhood.

153 destroyed 186 severely damaged 241 medium damage 351 slightly damaged.

302 dead, 184 injured and 15000 homeless.

In all 25 works and factories were At the destroyed or damaged. Milbertshofen BMW works buildings suffered 40% damage and machinery 10%. Nine workshops and buildings were destroyed and production ceased for about a week while the transformer station was being repaired. At the Allach works a number of huts were burnt down including a store of engine parts which was completely destroyed. At the Junkers Allach works only slight production loss was caused as a result of fire, mainly in huts.

The Central Station suffered severely and a number of suburban stations were also hit. Traffic as scheduled was not resumed until 1400 hours on 17 June.

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MUNICH 8a 2341 - IGK VII War Diary.

JUNE (USAAF)

Bombs dropped:

Houses:

Casualties:

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. The high pressure main of the Schwabing Gas Works was hit and a number of water main fractures were reported. A 25000 volt cable was hit and the tramway network was partially interrupted.

Considerable damage was caused to the Official Publications Centre of LGK VII which was hit by several bombs. Several stores of the Army Ordnance Depot in Milbertshofen were destroyed by a large fire. The airfield at Oberwiesenfeld was also hit and the taxying area damaged by H.E. bombs.

A terror raid took place which did not fully develope due to bad weather conditions. About 1000 bombers in eleven waves, flanked by a strong fighter escort, penetrated from 1055 hours until 1145 hours, flying on a S.E. course. Over Munich they flew at 6 - 7000 metres. The alarm lasted from 1139 to 1330 hours, the raid proper starting at 1226 hours.

6310 H.E. (123 duds or D.A.) approx. 4800 cil bombs tt 18000 phosphorous bombs n

320000 incendiary bombs.

224 dead (58 forces personnel) 160 injured and 30000 homeless.

> The following details are for the 4 raids of 11, 12, 13 and 16 July combined.

2926 destroyed (1352 by H.E.) 1704 severely damaged (928 by H.E.) 1914 medium damage (1156 by H.E.) 2660 slightly damaged (1688 by H.E.)

67 destroyed and 107 damaged. Among the destroyed were:

Dornier Works, Richlstrasse: Nos. I, II and III workshops were destroyed as well as a large quantity of production plant and machine-tools, stocks, planning particulars and office equipment. Except for one hangar the whole works was burnt down. Loss of production amounted to about 70%.

BMW., Lerchenauerstrasse: Several buildings were burnt down and damage. Damage to amounted to about 70%. machinery was over 10%.

/I.G. Farben

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G.3837/DOP/2/57/

MUNICH E. 974 - Pol.Pres. 8a2341 - IGK VII War Diary. 11 JULY (USAAF)

Bombs dropped:

Casualties:

Houses:

## Industrial:

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I.G. Farben Camera works: Severe damage was caused by fire but no loss in production ensued.

Auto-Union, Albrechtstrasse: A direct hit was scored in the large workshop, the painting and spray shop being partially destroyed.

Very considerable damage was caused to permanent way and traffic control installations. Severe damage by both H.E. and incendiary bombs was caused to the Central Station and 4 other stations. The whole of the railway traffic was brought to a standstill. A bus shuttle service was introduced from the outer stations to the town centre.

A large number of post offices and post office buildings were considerably damaged by H.E. and incendiary bombs. The damage to telephone communications was extraordinarily severe. Most cables were out of action and all teleprinter communications broke down.

A total of 148 buildings were destroyed and a further 235 damaged. Among those destroyed were 6 barracks, an army transport park and the Army Kommandantura.

Damage was caused to 4 bridges, 4 sewers, 52 electricity cables, 75 gas mains, 5 water mains and 315 cases of damage to tram tracks and overhead cables were reported.

In the whole of the LGK area 25 aircraft were shot down.

This was described as a heavy terror raid. From 1130 to 1238 hours about 900 aircraft escorted by fighters ahead of and flanking the bomber stream penetrated the LGK and launched their attack which lasted 89 minutes mainly from the west and north, the first bombs falling at 1259 hours. Severe damage was caused in the north of the town and in Schwabing many large fires were started which were nearly all under control by 2100 hours but of which only a small number had been extinguished due to lack of water supplies.

9410 H.E. 6400 oil bombs 25000 phosphorous bombs 400000 incendiary bombs

/Casualties:

Railways:

Army & Police:

Post Office:

General:

Losses:

 $\frac{12 \text{ JULY}}{(\text{USAAF})}$ 

Bombs dropped:

G.3837/DOP/2/57

MUNICH As above

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Details of injured and homeless 631 dead. Casualties: are not available. For further details please see report on raid of 11 July. MUNICH 13 JULY It was estimated that 1000 bombers As above (USAAF) escorted by 300 fighters were engaged in this the third of a series of heavy terror raids. They attacked in several waves, dropping the first bombs at 0926. Damage was greater in the inner town than on 12 July but again Schwabing was hit worst. Industrial damage was only slight. 2090 H.E. Bombs dropped: 3000 oil bombs 1400 phosphorous bombs 250000 incendiary bombs. Casualties: 425 dead. Details of injured and homeless are not available. For further details please see report on raid of 11 July. 16 JULY MUNICH About 800 bombers again with strong As above (USAAF) fighter protection attacked in several waves, dropping their first bombs at Again the focal point was 0939 hours. Schwabing, with Neuhausen and the neighbourhood of Gaertner Platz. 3760 H.E. Bombs dropped: 2550 oil bombs 8700 jet incendiary bombs 125000 incendiary bombs. Details of injured and homeless Casualties: 55 dead. are not available. This raid was responsible for a fair proportion of damage to industry, for further details of which please see report on raid of 11 July. Further damage was caused to post office telephone cables and in order to maintain the most inportant connections the air force laid overland cables. Gas, water and electricity were available only in some districts. MUNICH <u>19 JULY</u> Between 1033 and 1140 hours strong bomber As above. (USAAF) forces with fighter escort (estimated at 600 bombers and 200 fighters) approached on a broad front between the Kitzbuehler

G.3837/DOP/2/57/

RESTRICTED

/Alps

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Alps and Berchtesgaden on a northerly course. They passed Munich to the east and via Rosenheim, Landshut, Regensburg and Straubing returned to attack Munich from the north and east between 1054 and 1215 hours.

Bombs dropped:

2500 H.E. (64 duds or D.A.) 157000 incendiary bombs.

Houses:

89 destroyed 100 severely damaged 166 medium damage 316 slightly damaged.

Casualties:

177 dead, 300 injured and 2000 homeless.

BMW, Allach: About 40 H.E. bombs fell on the works but very little serious damage was caused. There was practically no damage to any of the machinery, and work was resumed the next day without loss in production.

Dornier Works, Neuaubing: These works were hit by numerous H.E. bombs, 4 direct hits being scored on No.2 Hangar (conveyer production). The initial estimate of loss in production was 60% but as the conveyer belt was not damaged that figure was not reached. At the firm of Friedrich Deckel 14 H.E. hits were scored on, inter alia, the administration, No.2 Pumping station and in front of the machine shop and the building housing semi-finished products which caused considerable loss in production.

About 30 - 40 bombs fell on the shunting station at Munich East and neighbourhood. Two full fuel waggons were set on fire. Five other stations were hit and the Nordring railway was closed due to a direct hit. The railway repair works at Neuaubing also suffered severe damage.

Due to the severe damage to stations and permanent way Munich no longer counted as a rail centre.

At the Army Ordnance Stores practically all buildings were either destroyed or severely damaged by a large number of H.E. and incendiary bombs. The Staff building, some garages, garage workshops and petrol pumps at the SS Barracks in Freimann were destroyed. The Flak barracks in Freimann were also damaged. Water, gas and electricity supplies failed. The Isar Power Station was temporarily put out of action due to the breaching of a dam.

/MUNICH

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Of 1000 bombers with fighter escort which penetrated the IGK area about 350 visited Munich from 1040 hours till the all clear at 1155 hours. The raid was directed mainly at the eastern parts of the town.

900 H.E. (40 duds) 800 oil bombs (8 duds) 35000 incendiary bombs Fragmentation bombs were also dropped in country districts.

80 dead, 250 injured and 3000 homeless.

80 destroyed 42 severely damaged 47 medium damage 200 slightly damaged.

Some of the departments of the Dornier works at Neuaubing were severely damaged by H.E. Several hotels were hit and gas and electricity supplies which were in process of being restored after previous raids suffered renewed damage. Some rail traffic was also interrupted afresh. The permanent way at Neuaubing was seriously affected. Service and police buildings including one harmacks also suffered redium to clickt

barracks also suffered medium to slight damage.

From 1134 to 1235 hours penetrations were reported of very strong bomber forces (about 1200 aircraft) with fighter protection between Remagen and Martelange on a SE course. Of these forces about 700 - 800 aircraft including fighters attacked Munich, affecting mainly the peripheral areas, particularly industrial and transport installations.

2650 H.E. (99 duds) 540 American oil bombs some 180000 incendiary bombs A very high number of H.E. bombs, out of all proportion to the number dropped, fell in open country.

About 380 kg of leaflets were also dropped.

103 destroyed118 severely damaged206 medium damage303 slightly damaged.

108 dead, 93 injured and 20000 homeless.

Although at the Lerchenauerstrasse works of B.M.W. Hangar 14 received a direct hit and a number of other buildings were damaged no loss in production was caused by this raid. At the Allach works 3 hangars and a number of other buildings

/were

<u>MUNICH</u> E.2436 - Pol. Pres. (USAAF) 8a.2341 - IGK VII War Diary.

Bombs dropped:

Casualties:

#### Houses:

MUNICH

8a 2341 - IGK VII War Diary. E.2436 - Pol. Pres.

31 July (USAAF)

Bombs dropped:

Houses:

Casualties:

G.3837/DOP/2/57/

343 A.T. -

- 90 -

The works of Maurer & were destroyed. Sons in the Freimannstrasse, making torpedo parts, suffered 100% loss in production. The main hall and workshops were destroyed. Damage was also inflicted on many railway installations and buildings. The Milbertshofen goods station was burnt out. There were also instances of damage to 22 electricity cables, 19 water and 1 gas main.

The alarm was sounded at 1234 hours and the first bombs fell in Munich-Riem at 1307 hours when about 450 bombers escorted by about 150 fighters carried out a heavy raid on railway installations, as well as on the neighbouring industrial and residential quarters. The all clear sounded at 1446 hours. The first wave which approached partly from the north and partly from the southeast restricted its bombing to the peripheral districts of Oberfoehring-Bogenhausen and Riem. It was the second wave which actually carried out the heavy raid.

Bombs dropped: 500 lb.)

Houses:

Casualties:

22 SEPTEMBER

(USAAF)

2656 H.E. of various calibres (102 dud about 950 fragmentation bombs (44 duds)

60 destroyed 112 severely damaged 129 medium damage 270 slightly damaged.

173 dead, 249 injured and about 1500 homeless.

Damage to railway buildings and installations amounted to 3 destroyed and 16 damaged. They included the administrative and regional offices and 2 workshops of the repair works in Freimann destroyed and all other workshops severely damaged. At least 60% of the works was destroyed and its output capacity was reduced 100% for an indefinite period. The arrival and departure tracks at the Central Station were rendered unserviceable and serious damage was done to the buildings themselves. Several other stations were similarly affected and at Daglfing a military train was severely hit, killing 16 personnel. Several stretches of line were blocked. Some post office buildings were destroyed and many more damaged as well as installations and cables. Military buildings and installations hit amounted to 14 destroyed and 20 These included buildings damaged. at several barracks. The aerodrome at Riem was destroyed. Damage

## MUNICH E. 859 - Pol. Pres.

- 91 -

Damage to industrial concerns was not very great. A transformer station at the Bayr. Leichmetall works was destroyed and valve production was interrupted. At the Neumayr Metal works one workshop was destroyed and one severely damaged, resulting in a temporary drop in output of 100%. The metal works of Maurer & Sons also had a workshop destroyed.

The main objective of this raid was the Central Station and railway installations. Some 450 Liberators and Fortresses and 100 Lightnings, Mustangs and Thunderbolts carried out the raid, dropping their first loads at 1156 hours. The all clear sounded at 1315 hours.

ped: 2300 H.E. bombs (189 duds)

237 destroyed 248 severely damaged 201 medium damage 304 slightly damaged.

323 dead, 375 injured and about 10000 homeless.

At the Central Station 16 tracks were destroyed and severe damage was caused to traffic control systems. Two trains were hit in the Central Station area and much damage was done to buildings, including a direct hit on a basement shelter. The main fuel stocks and signals and telegraph workshops were severely damaged.

At Laim Station 76 direct hits were scored on track installations and a shelter under the tracks was pierced. Twenty goods trucks were badly damaged. Three other stations were also damaged. A large number of post office buildings and installations were affected, including the Regional Administrative Office and Broadcasting House, where severe damage was done.

Public service installations also suffered. The steam power works at Schwabing was hit and 11 direct hits on the water works in the Dachauerstrasse destroyed or severely damaged a number of buildings including the workshops building, garages and stores.

Among military properties affected were 6 barracks and the transport park. At the latter considerable damage was caused to buildings and vehicles.

/MUNICH

MUNICH As above and 8a 2341 - LGK VIII War Diary. E. 2443 - Pol. Pres.

Bombs dropped:

Houses:

4 OCTOBER

(USAAF)

Casualties:

G.3837/DOP/2/57/

- 92 -

<u>MUNICH</u> E. 788 - Pol.Pr 8a.2341 - LGK VI War Di E. 859 - Pol.Pr 8a.2740 - LGK VI	I ary. es.	Between 800 and 1000 aircraft penetrated from the Italian theatre and 400 of them, including fighter protection, carried out a terror raid on Munich from 1145 to 1222 hours.
War Diary. Data. Bom	Bombs dropped:	2000 H.E. (90 duds or D.A.) 10000 incendiary bombs.

Houses:

52 destroyed

58 severely damaged

36 medium damage

58 slightly damaged.

Casualties: 65 dead, 93 injured and 2816 homeless.

The removal contractors Schenker & Co. were destroyed.

At the Metzeler Rubber Works a hit was scored in the rolling mill and the works were without power.

The Railway Repair Works was severely damaged in 4 workshops. The Central Station was also hit and the Goods sheds at the South Station were destroyed by fire which also destroyed 60 - 70 goods trucks. Traffic to the north, south and west could only move from the outer stations at Moosach, Allach and Pasing. A shuttle service functioned between Central and Pasing stations.

About 400 Liberators and Fortresses with 100 Mustang and Lightning escorts attacked in 4 waves, dropping their first bombs at 1202 hours. The first wave attacked Westend, South, railway installations at Central, South and Laim stations and Schwabing. The second wave attended to rail installations at Laim and Schwabing, Trudering, Prinzregentenplatz and The third concentrated Neuhausen. on the South and central sectors of the town, rail installations at Pasing and the outer southern quarters while the fourth went to Harlaching, Obergeising and Perlach/ Ramersdorf. The raid, referred to as a heavy terror raid, was carried out at high level.

2650 H.E. (205 duds) 3000 incendiary bombs.

/Houses:

Bombs dropped:

16 NOVEMBER

(USAAF)

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<u>MUNICH</u> E. 859 - Pol.Pres. 8a.2341 - LGK VII War Diary. 8a.2740 - " Data.

- 93 -

178 destroyed

157 severely damaged 216 medium damage 550 slightly damaged.

## Houses:

#### Casualties:

144 dead, 103 injured and 10000 homeless.

Severe damage was caused to the maintenance works at the Central Station, particularly to the electric engines sheds. At Pasing 3 110000 volt cables were broken. Various lines were interrupted due to numerous hits scored on the permanent way and damage to cables. Four barracks suffered damage as well as other military and police property.

A force of about 300 aircraft including fighter escort launched a medium attack between 1258 and 1320 hours from the north and northeast. The main target was railway installations.

MUNICH E. 859 - Pol.Pres. 8a 2470 - IGK VII War Diary Data.

Bombs dropped:

22 NOVEMBER

(USAAF)

Houses:

Casualties:

1760 H.E. (28 duds) and some incendiary bombs.

53 destroyed 65 severely damaged 111 medium damage 379 slightly damaged.

28 dead, 12 injured and 3000 homeless.

Three railway lines were blocked and the East Station slightly damaged. The majority of bombs however fell south of their targets. Public buildings hit included the Cathedral, the Academy of Science, the Ministry of the Interior and the Town Hall.

The Munich Chemical Factory (explosives and ammunition) suffered damage resulting in 4 weeks loss of production in the assembly and 8 days in the infantry ammunition departments. Rhode & Schwarz (radar instruments) at the Trauenitzstrasse works suffered serious damage causing 3 weeks complete loss of Siemens & Halske also production. sustained severe damage. The Police H.Q. was hit by 6 H.E. bombs which caused severe damage, affecting the telephone and teleprinter services, and the police barracks in the Rosenheimerstrasse was hit by 12 H.E. bombs.

About 60 H.E. bombs also fell on the Riem airfield, damaging the taxying area.

/MUNICH

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## 26/27 NOVEMBER

<u>MUNICH</u> As above and 8a.2341 - LGK VII War Diary.

Between 400 and 500 aircraft of unrecognised types were engaged in this raid. Judging by the course of the raid and the bombs dropped it is to be assumed that American 4 engined bombers followed a spearhead of twin-engined British aircraft. The attack which started at 0450 hours was a heavy terror raid, the town centre being the focal point.

Bombs dropped: 1690 H.E. (153 duds) 14000 jet incendiary bombs 95000 incendiary bombs 600 oil bombs 90 marker bombs 450 flares.

241 destroyed

286 severely damaged 427 medium damage 593 slightly damaged.

Houses:

Casualties:

172 dead, 193 injured and 20000 homeless.

The following were among those industrial concerns of significance which were destroyed: Rodenstock Optical works and No.2 Works of the Metzeler Rubber Works.

Steinheil & Sons Optical Works and the firm of Rhode and Schwarz were severely damaged. A number of fires sustained medium damage including the Sueddeutsche Waggonfabrik, Raw Metal Works (aluminium production was temporarily stopped) and Siemens and Halske. Suedwerk III of the municipal electricity works was destroyed by H.E. and flooding. Except for the destruction by fire of the South Station building and goods shed only medium to slight damage was done to the railway buildings and installations.

MUNICH		17/18 DECE
E. 859	 Pol. Pres.	
8a.2341	 LGK VII	•
	War Diary.	

# 17/18 DECEMBER

About 300 aircraft are reported as having carried out a heavy terror raid mainly on the inner town area and neighbourhood of the Central Station.

Bombs dropped:

75 mines (2 duds) 1100 H.E. (73 duds) 4000 jet incendiary bombs 75000 incendiary bombs 204 marker bombs 288 flares.

/Houses:

- 95 -

763 destroyed

481 severely damaged 491 medium damage 612 slightly damaged.

Houses:

Casualties:

452 dead, 909 injured and 49000 homeless.

A large amount of damage was done to industrial concerns, both destroyed and damaged, the most important of which were:

Rhode & Schwarz (telephone) destroyed: Daimler-Benz, I.G. Farben, Bosch workshops.

damaged: Siemens & Halske, Adler works, Kustermann Iron Works Rodenstock Optical Co., Steinheil & Sons Optical Co.

Little damage was done to supplies of gas, water and electricity.

The Railway Regional Offices were severely damaged by H.E. and incendiary bonhs as was also the Central Station. Workshops and the office building at the East Station were destroyed. The permanent way at the Central Station was so badly damaged that traffic was suspended for some time.

A large number of police and military properties were affected but in the main only medium to slight damage was caused.

The alert lasted from 1247 to 1449 During this time 150 aircraft hours. in 4 waves attacked the aircraft works of Bachmann & Blumenthal & Co. in Fuerth. No details of damage done are available.

850 H.E. (13 duds) 6000 fragmentation bombs (1228 duds) 1000 oil bombs (38 duds)

31 destroyed 62 severely damaged 45 medium damage 373 slightly damaged.

138 dead, 104 injured and 700 homeless. Casualties:

30/31 MARCH

NUREMBERG 8a. 2341 - LGK VII War Diary 1320 - Unknown. Ε.

Several hundred aircraft penetrated on an easterly course between 2329 and

/0036 hours

RESTRICTED

G.3837/DOP/2/57/

NUREMBERG E. 1320 - Unknown

FEBRUARY (USAAF)

Bombs dropped:

Houses:

- 96 -

0036 hours to the Coburg/Saalfeld area and then on a southerly course for a raid on Nuremberg and also on Schweinfurt and Bamberg. The attack lasted from 0102 until 0132 hours and 200 aircraft are estimated to have attacked in three waves.

Bombs dropped: 30 mines 1450 H.E. (11 duds) 52000 incendiary bombs 8000 phosphorous bombs.

fires.

Houses:

198 destroyed 420 severely damaged 879 medium damage 2505 slightly damaged.

Fires:

Casualties:

133 dead, 412 injured and 2400 homeless.

120 large, 65 medium and 420 smaller

A large fire was started at the works of Gebr. Decker and the railway lines to Regensburg, Eger and Amberg were temporarily cut. Major damage was inflicted on the Neumayr Rolling Mills, Viktoria, and the United Margarine Works. A number of decoy sites were also attacked, on which 6 mines, 110 H.E. and numerous incendiary bombs were dropped.

NUREMBERG/FUERTH As above

10 SEPTEMBER (USAAF)

Between 1010 and 1110 hours two forces of bombers each with fighter escort entered the LGK area to attack Nuremberg. The first force was about 400 and the second which also visited Ulm was about 6000 strong. The two raids which overlapped each other in time lasted from 1048 to 1136 hours and 450 bombers are reported to have participated. The southern part of the town and Fuerth were mostly affected.

Bombs dropped:

Houses:

Casualties:

- some 3100 H.E. " 1500 oil bombs
  - 100000 incendiary bombs.

211 destroyed 214 severely damaged 1365 medium damage 1800 slightly damaged.

82 dead, 366 injured and 7706 homeless.

Of 32 industrial works hit, one was destroyed and 11 severely damaged. MAN was severely damaged by H.E. and incendiary bombs but the tank works were not seriously affected. The

/South

- 97 -

South German Telephone & Cable Works and Bachmann & Blumenthal & Co. (Works I & II) were also severely damaged.

The Tuellnau bridge received a direct hit and traffic to Regensburg and Sulzbach was interrupted. Medium damage was also reported to the South Goods Station.

About 700 - 750 bombers with fighter escort attacked the north, central and south sectors of the town from 1211 to 1228 hours. The northern Old Town and the industrial area in the south were most severely affected.

5000 H.E. (1000 - 450 kg. 4000 - 220 kg.) Bombs dropped: 2000 incendiary bombs.

518 destroyed

2 destroyed

730 severely damaged 1097 medium damage 4109 slightly damaged.

25 severely damaged 18 medium damage 24 slightly damaged.

Houses:

3 OCTOBER

(USAAF)

Industrial:

Casualties:

Houses:

Casualties:

19/20 OCTOBER

NUREMBERG As above.

NUREMBERG

As above

A medium heavy raid developed after 250 - 300 aircraft with light fighter escort entered the LGK from 2036 hours, the industrial, south and central districts being affected.

353 dead, 1033 injured and 19286 homeless.

Bombs dropped: 80 mines 1200 H.E. 90000 incendiary bombs 3000 jet incendiary bombs.

> 445 destroyed 551 severely damaged 1073 medium damage 2304 slightly damaged

237 dead, 465 injured and 10383 homeless.

Severe damage was caused in the southern and central as well as in the industrial quarter and at the Shunting Station.

One industrial concern was destroyed and 29 others damaged, 7 severaly.

OBERHAUSEN

FD. 1435/45 - Ruhr-Chemie. 18/19 AUGUST

This raid took place at 0055 hours and The attack was lasted 18 minutes. launched from the west, southwest and south from a height of 5500 to 6500

/metres

G.3837/DOP/2/57/

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metres. In all between 2200 and 2600 bombs were dropped, of which some 350 H.E. (58 duds) fell on the Ruhrchemie Works. Damage caused was estimated at 10 - 15 million Reichsmark. Casualties were only 1 dead and 2 injured in the works. A complete stoppage of 2 - 3 weeks was caused, after which partial production could be resumed.

#### 6 OCTOBER

This raid was carried out by about 3 -400 Lancasters, Halifaxes and Mosquitos from 1708 to 1719 hours. About 250 H.E. bombs were dropped of which 50 -60 were duds. Casualties were 6 dead and 15 injured. Production fell by 100% for the time being. The main damage was caused to:

Water Gas Plant: A direct hit on the water circulating pumping station. Another direct hit on the water gas container (total loss).

Lubricating Oil Plant: The most severe damage was caused in this plant. All reaction towers and pipe bridges were burnt out. A direct hit was scored on the Aluminium Chloride store.

Catalyzer Factory: 7 solution tanks were holed and the contents (mainly cobalt solution) ran out, due to a direct hit.

Much damage was also caused to electricity, water, gas and steam supply systems and also to railway installations.

About 120 - 150 Liberators and Fortresses II took part in this raid which was carried out from a height of between 6500 and 8500 metres. About 80 - 100 H.E. (15 duds) of 1000 - 2000 lbs. were dropped on the Ruhrchemie works. No casualties were caused due to ample early warnings of the Flak.

Repair work which was in progress was severely hampered and it was not possible to give a new date for resumption of production. In the catalyzer factory 2 complete shaping units were destroyed by direct hits and other damage was also caused. In the Acids works there were several hits causing damage to oxygen, coke gas and cooling water pipes. Several hits were also scored in the Gas

/Production

## 6 NOVEMBER (USAAF)

RESTRICTED

<u>OBERHAUSEN</u> As above.

# OBERHAU SEN

As above.

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Production plant, causing damage to water gasometers, generators, office and stores and pipe lines. The works railway was also hit in a number of places causing damage to tracks and installations as well as rolling stock.

21/22 NOVEMBER

OBERHAUSEN As above.

The report from which the following details are taken, is on the raid as far as it affected the Ruhrchemie A.G. Between 300 and 350 aircraft are reported to have made the raid from a height of 6 - 7000 metres and flying on The duration of the a NW - SE course. raid was from 2100 to 2115 hours, during which time 350 - 400 H.E. bombs (89 duds or D.A.) were dropped. No casualties are reported as early warning enabled all staff to reach the bombproof shelters in good time. The date for resumption of production was delayed for some weeks as the chief power supply had suffered severe destruction. Over 230 hits were scored on the works, of which 10 were on the compressor house, 8 on the catalyzer factory and 9 in the Acids Works. The networks for the supply of electricity, gas, water and steam were severely damaged and the works railway received 41 hits, damaging  $1\frac{1}{2}$  km of track and 11 trucks.

The Weissenstein Camp was hit by about 60 bombs and all huts were either destroyed or severely damaged.

About 100 aircraft in 3 waves carried out this attack from 1130 to 1200 hours. This was only part of the total raiding force despatched, other aircraft visiting Halberstadt.

Inf. & Prop.

E. 1322 - Min. of Pub.

OSCHERSLEBEN

Bombs dropped:

Casualties:

11 JANUARY

(USAAF)

350 H.E.

a number of phosphorous bombs.

10 dead and about 30 injured.

In the main the AGO works were attacked, causing considerable damage. All the main production halls were destroyed and nearly all the others were hit. It was estimated that about a 50% loss in production ensued.

In the town area bombs fell at 4 places destroying 20 houses. Three aircraft were reported as shot down.

/OSNABRUECK

## - 100 -

11 mines

515 H.E. (30 duds)

At about 1825 hours 327 aircraft circled

bombers flew off in a westerly direction.

the town at 6 - 8000 metres. The raid lasted about 10 minutes after which the

13 SEPTEMBER

Bombs dropped:

		48497 incendiary bombs 669 phosphorous bombs 313 oil bombs.
	Houses:	708 destroyed 189 severely damaged 293 medium damage 1027 slightly damaged.
	Fires:	15 large, 39 medium and 162 smaller fires.
	Casualties:	82 dead, 57 injured and 10850 homeless.
		41 industrial concerns were destroyed and 53 damaged. The Osnabrueck Metal Works was severely damaged resulting in 2 days loss in production. The Kloeckner Works were likewise severely affected by 150 H.E., 300 incendiary and 30 phosphorous bombs causing damage in almost all departments and resulting in considerable loss in production. The Central Station was hit and the station post office destroyed. Rail traffic was suspended for some time. 230 H.E. & 3000 incendiary bombs
	· · · ·	destroyed 61000 sq.m. of permanent way and buildings.
REGENSBURG E. 2606 - Min. of Arm. & War Prod.	2 <u>5 FEBRUARY</u> (USAAF)	No other document is available and the following is a translation of relevant portions. The works referred to are the Messerschmitt works.
	Bombs dropped or	Works area and immediate neighbourhood.
	16 - 1800 H.E. 25000 incendiary	y bombs (this figure includes those dropped in the raid of 17.8.43.)

Hits scored on the Works area.

1440 - 1620 H.E. 22500 incendiary bombs (including those dropped on 17.8.43.).

No. of aircraft participating.

250 - 300.

/REGENSBURG

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## RESTRICTED

**OSNABRUECK** 

E. 2619 - Pol. Reps. E. 2606 - Min. of Arm.

& War Prod.

	-	- 101	
REGENSBURG 8a 2331 - IGK VII 8a 2330 - IGK VII War Doary Data.	20 <u>DECEMBER</u> (USAAF)	The alarm was sounded at 1116 hours and about 250 aircraft in 4 waves began their attack at 1203 hours which lasted 12 minutes.	
	Bombs dropped:	1500 H.E. bombs.	
	Casualties:	19 dead, 20 injured and 250 homeless.	
		The main weight of the attack was on the harbour area and damage was reported also at the Messerschmitt works, East Station, West Goods Station and the barracks area. A refugee train at the East Station was hit.	
• •	•	Other places in the Luftgau attacked included Straubing and 11 localities in the district of Regensburg. Figures for the whole Luftgau show:	
		3150 H.E. bombs dropped and 97 dead, 60 injured and 250 homeless.	
	•	At Burgweinling the dispersal site of Messerschmitt was 80,0 destroyed.	
REGENSEURG 8a 2330 - ICK VII War Diary Data.	28 <u>december</u> (USAAF)	This raid was carried out by about 160 aircraft between 1120 and 1338 hours from a height of from 5000 to 8000 metres.	
, ,	Bombs dropped:	about 1600 H.E. bombs	
		The areas most affected were the harbour area, the W., SW. and S. districts of the town and the goods station. In the harbour area an oil store and an oil tank were set on fire. The Flak barracks received a direct hit.	
		Damage to the railway installations included the cutting of the line to Nuremberg and Ingolstadt and considerable damage in various buildings of the goods station as well as to the railway maintenance works.	
ROSTOCK CD. 1268 - Works ARP Nordmark E. 2606 - Min of Arm & War Prod.	20 FEBRUARY (USAAF)	This raid was aimed chiefly at the 2 Heinkel works at Marienehe and in the Werftstrasse and the Neptun Shipbuilding Yards. Estimates of the number of aircraft engaged fluctuated between 60 and 120.	
	Bombs dropped:	about 5 mines 400 H.E. (15 duds) 1000 oil bombs (20 duds)	
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		/Houses:	

/Houses:

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# RESTRICTED

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Houses:

27 destroyed

17 severely damaged 13 medium damage 484 slightly damaged.

Casualties:

46 dead, 139 injured, 12 buried under debris, 6 missing and 1075 homeless.

In addition to damage to the main targets the firm of Arno Birkigt manufacturing aircraft and ammunition parts was hit by 9 H.E. bombs, almost completely destroying No.9 hangar and the machines in it. The vehicle repair shop was also severely damaged and production loss was about 60%. The Daimler-Benz Vehicle repair workshops were also hit by 6 H.E. bombs, one of which was dud. These damaged the repair workshop and boiler house and about 35% loss in production ensued.

One H.E. bomb fell in the middle of the Hanseatic Acetylene Gas Co., destroying the factory.

At the Marienehe works of Heinkel 21 H.E. 8 (D.A.) and 19 oil bombs (3 duds) destroyed the timber stores and the upper floor of the administrative building and rendered the carpenter's shop unusable. A number of other buildings were damaged and the monthly quota was reduced by 25/2 The Werftstrasse works were hit by 25 H.E. and 2 oil bombs which destroyed the boiler house except for one boiler and caused damage in various other buildings.

Five mines and 270 H.E. bombs fell on or in the immediate vicinity of the Neptun Yards. Of these the 5 mines and 70 H.E. bombs actually fell on the yards, destroying a ferry boat which had flak ammunition aboard and 2 tugs. The U-boat pens and a number of other workshops and buildings suffered varying degrees of damage. Nearly 10% of the total floor space was destroyed.

About 80 aircraft in 5 waves carried out this raid from 5000 metres between 1232 and 1459 hours.

#### Bombs dropped: 600 H.E. 400 oil bombs

Houses: about 100 destroyed.

97 dead, 168 injured and 4-500 homeless.

The transformer station of the electricity works was hit by 5 H.E. bombs and put out of action for a short time. At the gas

ROSTCCK CD. 1268 - Works ARP, Nordmark. CD. 325 - NSDAP H.E.

<u>11 APRIL</u> (USAAF)

Casualties:

#### RESTRICTED

/works

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works 20 H.E. and 2 oil bombs stopped gas production for about 10 days.

Two Heinkel works were hit, the Bleicherstrasse works suffering most, where about 30 H.E. bombs destroyed the administrative building and the gas plant. The mechanical workshop, carpenter's shop, armature shop, welding department and others suffered severe damage. A temporary loss in production of 100% ensued.

The Heinkel works at Marienehe were the chief target of this raid.

24 mines, 1100 H.E. (120 duds or D.A.) 1000 oil bombs

Damage resulted to a number of barrack huts, the fire station, 4 accommodation huts of the Luftwaffe Initial Technical School, all of which were destroyed. In addition a number of hangars, the wind tunnel, the apprentices' workshop and machines and stocks and equipment were severely damaged.

Between 1048 and 1409 hours about 250 aircraft carried out an attack in 6 waves.

1000 H.E. 10000 incendiary bombs 200 oil bombs

The Marienehe works of Heinkel were hit by about 600 H.E. and several thousand incendiary bombs. Two hangars and the wind tunnel were destroyed. A number of other hangars with their annexes were severely damaged. The annex for Lichtenstein installations was burnt out.

The production quota for He.111 was reduced from 20 for the month to 12. The transformer station at the Neptun Shipyards was destroyed.

This raid was carried out by a force of between 50 and 100 aircraft on the outward journey to another target, the actual attack lasting from 1113 to 1125 hours.

about 1200 H.E. (50 duds) 500 oil bombs at least 300 - 400 phosphorous bombs at least 2000 incendiary bombs.

/Houses:

ROST<u>OCK</u> CD. 1268 - Works ARP, Nordmark.

4 AUGUST (USAAF)

Bombs dropped:

ROSTOCK As above

25 AUGUST (USAAF)

Bombs dropped:

RUESSEISHEIM 8a 2341 - IGK VII E. 730 - Reg.Econ. Office, Wiesbaden. E. 2606 - Min. of Arm & War Prod.

Bombs dropped:

20 JULY

(USAAF

RESTRICTED

G.3837/DOP/2/57/

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Houses:

116 destroyed
75 severely damaged
200 medium damage
1000 slightly damaged.

Casualties:

166 dead, 247 injured and 850 homeless.

The primary target was the Opel Works where 280 H.E. (30 duds), 300 - 400 phosphorous and 2000 incendiary bombs were dropped in the works area. The transformer plant was destroyed, delaying resumption of production.

#### 12/13 AUGUST

RUESSEISHEIM 8a 2341 - LGK VII War Diary E. 730 - Reg.Econ. Office, Wiesbaden E. 2606 - Min. of Arm. & War Prod.

Bombs dropped:

Houses:

Casualties:

It was estimated that about 250 bombers in 4 waves entered the LGK area between 2335 and 2359 hours and attacked Ruesselsheim between midnight and 0020 hours.

20 mines 250 - 300 H.E. 10000 incendiary bombs 1000 jet incendiary bombs.

76 destroyed 143 severely damaged 400 medium damage 1200 slightly damaged.

9 dead, 31 injured and 1560 homeless.

The raid was aimed at the Opel Works where several carpets of H.E. and incendiary bombs caused comparatively little damage as the majority of the bombs fell in open country or wooded ccuntry to the south and east of the town. Of the bombs dropped only about 3 mines, 30 H.E. and 2-300 jet incendiary bombs fell on the works. Several fires were started in the town and damage caused in the Opel Works was in the rubber and fuel stores and in the despatch hall. In addition 5 decoy sites in Ruesselsheim, Frankfurt, Wiesbaden, Mainz and Darmstadt were attacked. On these a total of 24 mines, 24 H.E. and 14600 incendiary bombs were dropped.

Between 0003 and 0033 hours a force of about 3 - 400 bombers penetrated the LGK area for an attack on Ruesselsheim

and Darmstadt (for details of the attack on the latter, see separate entry). The raid on Ruesselsheim lasted from 0050 to 0150 hours.

RUESSELSHEIM			25/26	AUGUST	
8a	2341		IGK VII		
			War Diary.		<b>,</b> ·
Ε.	730		Reg.Econ.		
			Office,	•	
			Wiesbaden.		
Ε.	2606	-	Min. of Arm.		
			& War Prod.	• •	. •

RESTRICTED

/Bombs dropped:

G.3837/DOP/2/57/

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70 mines Bombs dropped: 200 H.E. (8 duds) 850 incendiary bombs 400 phosphorous bombs. Houses: 203 destroyed 600 severely damaged 400 medium damage

Casualties:

175 dead, 60 injured and 700 homeless.

1500 slightly damamged.

At the Opel Works the forge and toothed wheel production were out of commission for some weeks. The Vehicle Section was not affected as sufficient stock was available. Two military installations were destroyed and two transport severely damaged.

As a result of this and the two previous raids about 110000 sq. metres of floor space was destroyed at the Opel Works out of a total of 415624 sq. metres, i.e. about one quarter.

An estimated force of 200 bombers penetrated between 0832 and 0841 hours south of Metz and north of Nancy and linked up with two formations of fighters in the area of Saarbruecken. The bombers were in 3 waves, the first and third made up of Liberators and the second of Fortresses. The fighters were identified as Lightnings and Mustangs. Over the target the bombers flew at 6 - 7000 metres and the fighters at 8500 From 0840 - 0900 hours sections metres. of formations - 15 to 20 aircraft in each section - attacked from the west and southwest.

Bombs dropped:

Houses:

Casualties:

3350 H.E. 30 oil bombs.

196 destroyed 170 severely damaged 185 medium damage 940 slightly damaged.

85 dead, 147 injured and 2700 homeless.

Five industrial concerns were hit, one of which was destroyed. The textile firm of Arnold Becker & Co. suffered severe damage materially when 4 direct The despatch hits were scored. department and all stocks were destroyed. The Saar trunk gas main at the goods station was destroyed. Post Office buildings suffered severe damage

/when

## 8a 2341 - LGK VII War Diary.

G.3837/DOP/2/57/

RESTRICTED

SAARBRUECKEN

# (USAAF)

28 JUNE

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when 9 H.E. direct hits were scored. The telephone exchange was severely damaged and the repeater station destroyed.

Two military installations were destroyed and three damaged.

The main objectives were evidently railway installations and the residential quarter. In the Old Town the districts of St. Johann, Malstadt and Klein-Roesseln were affected. Passenger traffic was suspended for two days as a result of damage to the Central Station. The Goods and Shunting stations were also hit and damaged. In the harbour where 25 H.E. bombs fell, 3 ships were sunk and a crane and the quayside railway were hit.

A further 950 H.E. bombs were dropped on 22 communities in country districts, killing 9 and injuring 10 and some damage to property.

A formation of about 200 - 300 aircraft penetrated the KGK area at 0910 hours. About 10 carpets of bombs were laid mainly on the railway installations.

660 H.E. 6600 incendiary bombs.

medium or slight damage.

Houses:

Bombs dropped:

Casualties:

13 JULY

(USAAF)

22 dead, 87 injured and 1600 homeless.

107 destroyed and 765 suffered severe,

The main force of the attack fell on the Central Station. The Goods Station and main Signals Box were also severely damaged and the Burbach Foundry was also affected by H.E. and incendiary bombs.

SAARBRUECKEN As`above

SAARBRUECKEN

As above

16 JULY (USAAF)

Between 200 and 250 aircraft carried out this raid which was directed chiefly against the Central Station. Industrial targets also suffered considerable damage.

Bombs dropped:

Houses:

101 destroyed 130 severely damaged 209 medium damage

2200 - 500 lb. H.E.

780 slightly damaged.

Casualties:

54 dead, 50 injured and about 1500 homeless.

/Brebach

G.3837/DOP/2/57/

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Brebach Central Station was hit and a direct hit was scored on a goods train The railway repair in Scheidt Station. works were very heavily hit and the Hallbbrger Foundry in Brebach suffered damage causing 100% stoppage for 8 days. Direct hits by H.E. bombs on the testing rooms also caused 100, drop for the time being. The Roechling Iron and Steel Works also were hit by H.E. bombs in the Thomasmuehle and in a shelter trench. The Saar Steel Works Dingler, Karcher & Co. suffered a loss of 100% for about a fortnight.

Two waves of 150 and 100 aircraft respectively raided mainly the districts of Burbach, St. Arnual and the town centre. Very heavy calibre bombs and a very large number of incendiary bombs started wide-The Burbach Foundry and spread fires. Roechling suffered medium damage, the Central, Burbach and Voelklingen stations severe. The fire station was destroyed and water and electricity supplies failed temporarily. Casualties amounted to 30 dead and 100 injured. The Oxygen plant of I.G. Farben in Gersweiler was also damaged and put out of action for at least 4 weeks.

SCHWEINFURT

SAARBRUECKEN E. 970 - IGK VII

FD. 4372/45 - I.G. Farben

Damage Returns

E. 2606 - Min. of Arm. & War Prod.

24/25 FEBRUARY

5/6 COTOBER

This is the only source available and information refers to the ball-bearing No details are available works only. of any other results of the raid.

102881 kg. H.E. & incendiary

68330 kg. H.E. & incendiary

Estimated No. of Aircraft:

Weight of Bombs dropped:

Weight of Bombs on works

areas:

13 APRIL

(USAAF)

Floor area of works buildings destroyed:

1100

79435 sq. metres.

A medium heavy attack was launched against Schweinfurt and Augsburg as well as a number of airfields. From1313 to 1525 hours penetrations by strong formations with fighter escort took place between Longwy and Remagen. The more northerly force attacked Schweinfurt and at 1436 hours a covering force was at Kaiserslautern and after

/covering

SCHWEINFURT 8a 2341 - LGK VII War Diary . E. 2606 - Min. of Arm. & War Prod. .

- 108 -

covering the returning bombers left the IGK area between Luxemburg and Remagen.

At 1338 hours the stronger force changed course to SE in the Saarbruecken/ Pirmasens area for their attack on Augsburg and airfields. (For details see under Augsburg and Airfields.)

Bombs dropped:

500 H.E. 2500 oil bombs

Houses:

Fires:

53 destroyed 106 severely damaged 282 medium to slight damage.

40 major, 31 medium and 100 smaller fires.

Casualties:

13 dead, 37 injured.

The Rotenburger Metal Works are reported as destroyed, while Kugelfischer, VKF and Duetsche Gelatine suffered severe and Fichtel & Sachs medium damage.

At Fichel & Sachs 756 sq. metres of floor space were destroyed by 67 incendiary bombs and Kugelfischer, Georg Schaefer & Co. suffered damage from 1800 kg of mines, 29000 kg of H.E. and 3500 kg of incendiary bombs which destroyed 17/5 (= 42500 sq. metres) of floor space.

In addition, 500 H.E., 270 fragmentation and 608 oil bombs were dropped on the 80 localities, destroying 77 houses and damaging 203, killing 114 and injuring 130.

#### 26/27 APRIL

Between 0054 and 0143 hours a force estimated at 400 to 500 aircraft entered the area and steered an E course between Mannheim and Stuttgart and later a N course to Schweinfurt.

Bombs dropped:

6 mines 300 H.E. 5000 phosphorous bombs 20000 incendiary bombs.

Houses:

122 destroyed 120 severely damaged 64 medium damage 335 slightly damaged.

Casualties:

5 dead, 45 injured.

The ball-bearing works sustained fairly heavy damage. No.1 Works of the United Ball-bearing Co. were obliged to reduce their production for some days. At

/Fichtel

SCHWEINFURT As above.

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Fichtel & Sachs the gas generator plant was put out of action for some time as a result of fire and the Star Co. suffered very severe damage, resulting in a 100% drop for some time. The Rotenburger Metal Works also suffered a 100% drop for about a fortnight as a result of severe damage by H.E. bombs.

In the Armaments Ministry document the weight of bombs dropped on the Star Kugelhalter Gesellschaft, Kugellager Fichtel & Sach and Kugelfischer, GeorgSchaefer & Co. is given as about 22000 kg of mines, H.E. and incendiary bombs. The greatest weight fell on Kugelfischer, Georg Schaefer & Co. but 68% (16625 sq. metres) of the works area of the Star Kugelhalter Gesellschaft was destroyed.

About 200 - 250 bombers with fighter escort penetrated on an easterly course from 0810 to 0903 between Schneeifel and Ahrweiler.

1000 H.E. 1200 oil bombs 5000 incendiary bombs.

123 were destroyed and 200 sustained medium to slight damage.

5 dead, 30 injured and 49 missing.

Fichtel & Sachs ball-bearing works sustained damage causing 100% loss in production for the time being, and Star Ball-bearing works suffered medium damage. The telephone and teleprinter services were put out of action. The Adolf-Hitler Barracks also suffered damage by H.E.

Accroding to Document E. 2606, 39 H.E. and 10 incendiary bombs fell on Fichtel & Sach, destroying 9416 sq. m. of floor space of the works. At Kugelfischer, Georg Schaefer & Co. 18000 kg of H.E. and 1900 kg of incendiary bombs were dropped destroying 18000 sq. m. (= 8%) of the total works complex.

About 350 - 400 aircraft carried out a raid between 1432 and 1515 hours, when the main target was the industrial area of the town.

: 1500 - 2000 H.E. as well as incendiary bombs.

/Fires:

SCHWEINFURT As above

Casualties:

Houses:

19 JULY

(USAAF)

Bombs dropped:

SCHWEINFURT E. 970 - LGK XIV.

<u>.</u>:

9 OCTOBER (USAAF)

Bombs dropped:

G.3837/DOP/2/57/

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Fires:

1 major and 12 smaller fires.

22 dead, 14 unrecovered.

Casualties:

Kugel-Fischer was hit by 9 H.E. and some damage was caused.

No.2 Works of VKS suffered severely in the press shop, lathe department, machine tool shop etc. A quantity of oil was burnt. The Star Ball-bearing works suffered from H.E. and the main water supply was destroyed. Considerable damage was also caused to the electricity supplies.

The Central Station was hit by 58 H.E. and 5 duds, causing 12 lines to be put out of A quantity of H.E. bombs was also action. dropped on targets in the neighbourhood of Schweinfurt causing material damage and a number of fatal casualties.

A heavy attack by 300 aircraft took place between 0340 and 0430 hours from 3 different directions and from a height of about 4000 metres. The overall effect of this raid was greater than from the last heavy attack of April, 1943, caused partly by the effect of a storm blowing up and fanning the flames. An area fire occurred in the business quarter. The main weight fell on the North, South and Harbour Sectors. Three waves of attackers were diverted by decoys and flares shot up from the ground. On decoy sites alone 53 H.E. bombs were dropped. 16 aircraft are reported as having been shot down.

10 mines 960 H.E. (51 duds) 132500 incendiary bombs 7000 phosphorous bombs 2500 oil bombs Total weight 355 tons.

327 large, 239 medium and 628 smaller fires.

2700 destroyed 2000 severely damaged 4500 slightly damaged.

17 destroyed 7 severely damaged 10 slightly damaged.

Casualties:

90 dead, 566 injured and 17000 homeless.

/31 military

STETTIN 5/6 JANUARY E. 1322 - Min. of Pub. Inf. & Prop. E. 2606 - Min. of Arm. & War Prod.

RESTRICTED

Bombs dropped:

Fires:

Houses:

Industries:

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31 military installations were either destroyed or damaged.

Targets of industrial significance hit include: Rhenania-Ossag; German American Petroleum Co.,; Auto-Union; the warehouse quarter of the harbour; the Schaefer Caterpillar Works in the Pasewalkstrasse and power station in the Franzoesischestrasse. The Central and Goods Stations were severely hit. Traffic was maintained by a shuttle As a result of damage to the service. Electricity Works power output fell by 40% and was not back to normal for a fortnight. Of the 3 water works one was put out of action. The gas works was also damaged. Communications were practically impossible. A sea-going vessel was sunk and 2 set on fire, while 4 coastal vessels were sunk, 4 more set on fire and a further 19 damaged. A gunnery training ship was damaged.

STETTIN E. 2606 - Min. of Arm. & War Prod.

The following is extracted from a table compiled by the office of the Lord Mayor of Stettin on 26 October, 1944.

Date of Raid:	20.6.44	17.8.44	30.8.44
No. of attacking aircraft:	400-450	350-400	250-300
Bombs dropped:	8250 HE	17 mines 1300 HE 32000 incend. 100000 phos., oil & jet inc.	15 mines 2200 HE 100000 incend. 12500 oil & phos.
Hits scored on: (a) res. & bus. premises, public & cult. bldgs. schools, hosp. etc.	25	1623	2079
(b) <u>industrial install-</u> ations:	1	47	47
(c) transport install- ations:	 	12	11
Tonnage:	785	662	816
· .			

Note: The table from which the above is an extract covers 9 raids from 21.4.43 to 30.8.44. The total built-up area of the town is shown as:

Residential	6452 acr	es (approx.	.)
Industrial	2125 <b>"</b>	( 11	)
Transport	3010 "	( "	)

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	The total of des	stroyed built-up area ia shown as:-
	Residential Industrial Transport	1642 acres (Approx.) 1225 " ( " ) 105 " ( " )
STEYR 8a 2671 - Lw.Ops. Staff.	2 APRIL (USAAF)	With 300-400 Fortresses and Liberators from Italy, the largest number to date, a medium heavy attack was made from 1110 to 1136 hours. The raid was directed against the ball-bearing factories and the Daimler-Benz and the Puch engine works. Fighter defences which were in greater strength than the bomber crews had expected first made contact near Udine. Flak was reported to be inaccurate. Lfl.Kdo.Reich claimed 35
	• • •	bombers and 3 fighters shot down. Bombs dropped amounted to 1500 H.E., 2000 incendiary and numerous phosphorous bombs.
STRASSBURG CD. 317 - NSDAP District Office.	<u>27 may</u> (USAAF)	Between 1305 and 1315 hours.400 - 600 aircraft (bombers and fighters) pene- trated and of these about 200 attacked a number of targets including Junkers at Meinau.
	Bombs dropped:	418 H.E. (21 duds)
	Houses:	31 destroyed 49 severely damaged 60 medium damage 200 slightly damaged
	Fires:	1 major, 7 medium and 3 smaller fires.
	Casualties:	43 dead, 85 injured and 475 homeless.
		Of 16 industrial concerns hit 3 were destroyed. The Westphal Armamets Works, Junkers and Daimler-Benz were severely damaged. Considerable damage was done to the shunting station install- ations where a railway electricity station was destroyed and also various sheds and workshops.
STRASSBURG CD. 317 - Pol. Pres.	11 AUGUST (USAAF)	This raid lasted from 1513 to 1535 hours and was carried out by 60 - 80 aircraft. The main targets were the town centre, the railway repair works and the petroleum harbour.
· · · ·	Bombs dropped;	1334 H.E. (135 duds) 10 phosphorous bombs (2 duds) 40 oil bombs (3 duds)
		/Fires;

RESTRICTED

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G.3837/DOP/2/57/

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Fires:

Houses:

Casualties:

17 major, 18 medium and 6 smaller fires.

110 destroyed 203 severely damaged 278 medium damage 855 slightly damaged.

164 dead, 322 injured, 60 buried under debris, 31 missing and 3845 homeless.

Only slight damage was caused to industrial concerns but greater damage resulted in the harbour area and to railway installations. In the harbour 9 ships were destroyed and in the petroleum harbour 20000 tons of petrol and crude oil were burnt. The Railway Repair Works at Bischheim, the goods station at Hambergen, the Bischheim station and the rail bridge to the petroleum harbour were all damaged. The Army District Command in the Zuericherstrasse was destroyed by H.E. and incendiary bombs.

STRASSBURG As above. 25 SEPTEMBER (USAAF)

Bombs dropped:

Fires:

Houses:

Casualties:

This raid took place between 1125 and 1210 hours. The number of aircraft participating is not given.

2 mines 2100 H.E. (150 duds) 11 oil bombs (1 dud)

24 major, 6 medium and 9 smaller fires.

267 destroyed 221 severely damaged 327 medium damage 892 slightly damaged

412 dead, 525 injured, 86 under debris, 57 missing and 4500 homeless.

Among those buildings and concerns damaged were the firm of Mannesmann, a large garage in which 50 army vehicles were burnt and the post office which was very severly damaged by several direct hits. Telephone communications were interrupted for an indefinite period and the tramway system was brought to a stanstill also for an indefinite period. The army clothing office was destroyed and a number of other premises were damaged, including several barracks.

STUTTGART

8a 2341 - IGK VII War Diary. 20/21 FEBRUARY

From 0252 to 0345 hours penetrations by several hundred aircraft occurred on a wide front between Mannheim and Muehlhausen/Alsace. Some diversionary

G.3837/DOP/2/57/

#### RESTRICTED

/routes -

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routes led as far as southeast of Munich. Bombs were dropped on Stuttgart between 0235 and 0451 hours when the centre of the town, Feuerbach, Cannstadt, Ludwigsburg and Kornwestheim were mainly affected. The raid was reported as a medium heavy attack. About 75 localities in the surrounding countryside were also hit. Six bombers were reported as show down.

Bombs dropped:

30 mines 365 H.E. (60 duds) 36450 incendiary bombs (900 duds) 3000 phosphorous bombs (350 duds) Numerous leaflets.

Fires:

House's:

223 large, 405 medium and 1969 smaller fires.

645 destroyed 630 severely damaged 930 medium damage 3910 slightly damaged.

46 severely damaged 30 medium damage 16 slightly damaged.

29 destroyed

Industrial:

Casualties:

147 dead and 718 injured.

Although no details of the damage sustained is given the following were among the more important targets hit:

Robert Bosch, Feuerbach; AEG, Cannstadt; Gas works and coking plant in Ulmenstrasse. Considerable damage was done to various electricity supply plants, e.g. the transformer works in Feuerbach and Obertuerkheim were put out of action. A further 35 - 40 medium sized industrial concerns suffered damage, some severe.

The following particulars are recorded concerning the 75 localities referred to above:

Bombs dropped:

RESTRICTED

10 mines (1 dud) 325 H.E. (48 duds) 22300 incendiary bomns (1040 duds) 2760 phosphorous bombs (670 duds)

Fires:

14 large, 127 medium and 330 smaller fires.

/Casualties:

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Casualties:	23 dead, 30 injured and 1240 homeless.
Houses:	127 destroyed

130 severely damaged 286 medium damage 1200 slightly damaged.

1/2 MARCH

STUTTGART As above.

Penetrations on a broad front between Zabern and Muehlhausen by aircraft estimated at 300 to 400 took place from 0209 to 0230 hours. The majority flew to Stuttgart on a N or NE course and attacked from 0258 to 0335 hours. The weight of the attack was borne by the town centre as well as the suburbs of Cannstadt, Gablenberg, Fellbach, Moehringen and numerous localities in the neighbourhood.

74055 incendiary bombs (240 duds) 4700 phosphorous bombs (684 duds)

Bombs dropped:

Houses:

Industrial:

Casualties:

15/16 MARCH

442 destroyed 740 severely damaged 1236 medium damage 5650 slightly damaged.

178 mines (1 dud)

723 H.E. (4 duds)

3 destroyed 13 severely damaged 14 medium damage 10 slightly damaged.

80 dead, 406 injured, 22 buried and some 21000 homeless.

Among buildings of particular importance, of which 28 were severely damaged, were: The Palace of Justice, the East Treasury Office, the Ministry of Economics and Broadcasting House.

From 2212 until 2229 hours several hundred aircraft penetrated the Luftgau between Metz and Belfort, with the majority attacking Stuttgart from the west and the southwest. Damage was caused particularly in the residential districts, only slight damage resulting in the industrial area. Large fires were started in the southern sector and town centre as well as at Haslach, Eiernest and Kaltental. The following details cover, besides Stuttgart, about 60 - 70 localities, including Tuebingen, Reutlingen, Echterdingen etc. The raid is described as a medium heavy attack. In Stuttgart the Flak expended 13638 of ammunition.

/Bombs dropped:

STUTTGART as above.

RESTRICTED

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57 mines 692 H.E. 24700 incendiary bombs 8050 phosphorous bombs.

Fires: 205 major, 245 medium and 910 smaller fires.

Houses: 583 destroyed 596 severely damaged 1107 medium damage 3855 slightly damaged.

Casualties:

Bombs dropped:

ies: 120 dead, 300 injured and 5840 homeless.

16 industrial targets were damaged, 8 or them severely.

At Echterdingen airfield large hangars were destroyed or very severely damaged and a quarter of them were unusable for a fortnight. Workshops were destroyed and the engine workshops and the main buildings were burnt out. Three hangars storing instruments were destroyed as were also 2 DF houses. Damage to the airfield itself was only slight. The station at Tuebingen-Lustenau was completely destroyed.

24/25 JULY

Some 350 - 400 bombers entered the LGK area at a height of 5000 to 6000 metres.

Bombs dropped: 20 mines 1000 H.E. (100 duds or D.A.) 13500 incendiary bombs 3000 oil bombs.

Houses:

300 destroyed 500 severely damaged 500 medium damage 2000 slightly damaged.

Fires:

Casualties:

78 major, 142 medium and 287 smaller fires.

85 dead, 168 injured, about 200 not yet recovered and about 10000 homeless.

Robert Bosch works suffered medium damage causing a loss of production for about 4 days. A number of other firms, including Zeiss-Ikon, suffered damage causing a stoppage for a few days. The Observer Post detachment received a direct hit. The Central and West Stations suffered severe damage and traffic was restricted. Gas, water and electricity supplies were also affected and in some districts failed altogether.

/STUTTGART

G.3837/DOP/2/57/

RESTRICTED .

STUTTGART

As above

STUTTGART As abové. 25/26 JULY

Bombs dropped:

Fires:

Houses & Casualties: About 300 bombers were reported entering the LGK are between Muenster/Alsace and Basel on an easterly or north-easterly course from 0102 to 0120 hours.

some 2000 H.E. and several thousand incendiary, phosphorous and jet incendiary bombs.

150 major, 300 medium and 800 - 1000 smaller fires.

No figures are given.

Robert Bosch works in the Militaerstrasse suffered severe damage and the firm of Roessner & Wagner was destroyed.

There was a great lack of water for fire-fighting. In addition, gas and electricity supplies failed. Tram services in the town centre ceased and railway traffic only went as far as Feuerbach and Cannstadt.

Five waves of bombers, about 400 - 500 aircraft, penetrated between Metz and Muehlhausen on an E and NE course from 0105 until 0116 hours.

50 mines 1000 H.E. (200 duds or D.A.) 2500 incendiary bombs (200 duds) 2000 phosphorous bombs (250 duds)

55 dead, 130 injured, 65 not yet recovered and about 10000 homeless.

The town centre was completely destroyed as well as the centre of Feuerbach. In Zuffenhausen mainly the neighbourhood of the West Station was damaged. No hits were scored on armaments firms where only superficial damage was inflicted. Most of the bombs fell on Feuerbach, Zuffenhausen and Hesslach. Of industrial concerns hit only Manz & Pfeiffer and Schnorr are mentioned as severely damaged.

STUTTGART As above 12/13 SEPTEMBER

About 250 heavy bombers carried out this raid which affected the inner town with the Central and Goods Stations and the industrial districts of Cannstadt and Feuerbach.

Of the industrial targets hit the Bosch works in Stuttgart and Feuerbach were

G.3837/DOP/2/57/

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SUTTGART As above. 28/29 JULY

Bombs dropped:

Casualties:

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very severely damaged. AEG in Cannstadt and the Mahle Piston factory were also damaged.

The shuntings and goods stations in Feuerbach, the Central Station, the railway repair workshops, the Main Post Office and the Railway Regional Offices were affected as well as a number of government buildings.

DECEMBER

About 300 R.A.F. 4-engined bombers with fighter protection raided Trier between 1430 and 1530 hours. The town centre, the southwest and east of the town and the suburb of Olewig were hit.

Bombs dropped: 3000 H.E. and some incendiary bombs.

3500 severe to medium damage

Among the targets were the Town Hall, Central Post Office, County Court, 5 public buildings, 2 hospitals, the cathedral and 3 churches, the Rhein Westf. Electricity works and one industrial concern severely damaged.

The number of casualties was not known

Geestemuende and also Wesermuende-Lehe.

The severest damage was

at the time of making the report.

2500 slightly damaged.

7 major fires.

500 destroyed

Fires:

Houses

he tombo se unka Boun

18/19 SEPTEMBER WESERMIJENDE CD. 1283 - Works ARP. Niedersachsen.

From 2120 to 2218 hours 3 formations of fast bombers approached on a SE course until Bremen and then turned NW for an attack on Wesermuende. Note: In Bomber Command Diary of Operations Bremerhaven is show as the target for this date.

some 2000 H.E.

Bombs dropped:

### " 80-10000 incendiary bombs " 1200 phosphorous bombs

#### Casualties:

A number of mines and numerous jet incendiary bombs. To date (22.9.44.) over 100 dead.

in Wesermuende-Mitte and Alt-

This number will doubtless increase. Many injured, the majority suffering from burns.

No.1 Works of the German Ship and Machine Building Co. suffered a temporary production decrease of 100%. The Geestemuende Gas works was hit and the gasometer was burnt

#### TFR 970 - IGK XIV.

G.3837/DOP/2/57/

#### RESTRICTED

/out

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21/22 JUNE

out and the installations destroyed. It was estimated that it could not operate again for 3 months. The gasometer at the Mitte gas works was also burnt out and supplies would be available again in about a fortnight. A large number of other firms of lesser importance were either destroyed or severely damaged.

The following is a translation of an undated manuscript headed "Final Report -22 June 1944".

"In all:

560 H.E. 87 duds 146 mines 1 dud 26 dead 56 injured 290 homeless

Cologne Town:

12 H.E. 4 dead 10 injured

Bergheim District:

8 H.E. 2 mines slight damage to houses 1 aircraft shot down

Bonn District between Hersel and Widdig:

260 H.E. 25 duds 123 mines 1 house severely damaged 310 houses slightly damaged Railway line Cologne to Koblenz cut due to dud.

Erkelenz District:

1 enemy aircraft shot down.

Euskirchen District:

6 H.E. and 3 duds near Weilerswist Rail line to Cologne-Euskirchen cut

Geilenkirchen District:

1 enemy aircraft shot down

/Juelich District:

WESSELING E. 2459 - Min. of Pub. Inf. & Prop.

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Juelich District:

3 enemy aircraft shot down 8 H.E. 12 duds 2 dead

Cologne Country District:

106 H.E. near Wesserling 14 duds 6 mines 19 dead 43 injured 290 homeless

1 pipe bridge at the Union Kraftstoffwerk destroyed.

Remainder of Cologne Country District;

38 H.E. 7 mines slight damage to houses.

Siegkreis:

150 H.E. 34 duds 13 mines 7 dead 10 injured

Rhein Bergischer District, Porz:

134 H.E. 5 mines Only damage to houses.

#### 18/19 JULY

The only document available is a plan of the lay-out of the plant of the Union Rheinische Braunkchlen **Kraftstoff** A.G. plotting the bomb fall. From this may be seen at least 640 H.E. bomb craters including a number of duds or D.A. The plan shows a remarkable concentration, only 5 bombs apparently falling outside the limits of the plant.

About 600 aircraft from the Italian theatre attacked between 1025 and 1045 hours. During this raid 9 aircraft were destroyed and 4 damaged on the ground as well as a nummer of engines. Of 101 aircraft used in the defence 21 were shot down, 1 was missing and 2 damaged. Allied losses amounted to 9 shot down and 3 probables.

#### RESTRICTED

/WILHEIMSHAFEN

WESSELING FD. 4188/45 - Speer

Documents

WIENER-NEUSTADT 8a 2671 - Unknown. 29 MAY

#### - 121 -

WILHELMSHAFEN R.265 - Registrar's Office 15/16 CCTOBER

No information concerning bomb load or houses etc. damaged is available. This was to date the heaviest raid and most air raid damage reports were destroyed by fire in this raid. Casualties reported were 29 dead.

At the Naval Yards among other installations destro ed were the engine construction workshop and a drawing office. A large number of installations were severely damaged. These included a new welding house, a gun emplacement, crane and compressed air installation and engine and ship building workshops. A number of other workshops etc. were also slightly damaged. Some damage was also caused to quayside and floating installations and one U-boat was sunk and another damaged. There were also 20 instances of damage to naval railway tracks, installations and rolling stock.

#### G.3837/DOP/2/57/

#### ALLIED AIR ATTACKS ON GERMANY - 1944.

#### PART II - AIRFIELDS

24. DECEMBER. BIBLIS. LGK XIV. E. 970 -(USAAF)

DARMSTADT-GRIESHEIM.

As above.

ERBENHEIM.

As above.

About 250 Fortresses, part of the force of 1200 4-engined aircraft and 200 Marauders with 750 fighter escort which penetrated the Rhein-Main area between 1130 and 1555 hours, dropped 1000 H.E. bombs on the taxying area and the immediate surroundings. During the following night the airfield was cleared to enable the aircraft to leave for Mannheim-Sonthofen. Landing was not possible and the airfield was not serviceable for 4 days. One FW 190 was destroyed and 3 more FW 190 and 2 Ju 88 were damaged.

About 100 of the same force as above dropped 830 H.E. bombs at 1550 hours, causing 200 craters in the take-off and landing areas and 30 on the perimeter track. Four huts and two houses were damaged. The airfield was serviceable for landing by day on an area of 800 x 200 metres but was not fully serviceable until 10 January.

Some 700 H.E. bombs (50 D.A.) were dropped by 7 formations each of 12 - 15 Fortresses from a height of 6000 metres, attacking from the SW, on the airfield and dispersal. points outside the airfield at 200 - 300 metres intervals and on the north of the airfield on splinter-proof shelters. Damage included:

Aircraft: over 60% - 1 FW 190, 1 Me 109. under 60% - 2 FW 190, 2 Me 109.

Transport: 3 lorries (incl. 1 bus) 100%. Buildings: 1 workshop hangar (35%) 3 hangars (each 10%) 1 hut (60%)

7 houses (25 - 100%)

1 transport hangar (80%)

1 transport workshop (100%)

1 accommodation building (80%).

Taxying Area: 150 - 200 craters, take-off and landing runways unserviceable. Night lighting 10% damaged.

ETTINGHAUSEN As above.

24 DECEMBER. (USAAF)

24. DECEMBER.

(USAAF)

10 NOVEMBER.

(USAAF)

Part of the main force referred to under BIBLIS above laid bomb carpets at 1435 hours which resulted in 700 craters. The landing runway was clear. 7 FW 190 and 2 Ju 88 were damaged.

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8a 2341 - IGK VII

War Diary.

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E. 970 - LGK XIV.

 $\overline{8a \ 2341 - IGK \ VII}$  (USAAF)

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27 MAY.

10 NOVEMBER.

(USAAF)

13 APRIL.

(USAAF)

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24 DECEMBER. (USAAF)

Between 1417 and 1448 hours 1000 H.E and many incendiary bombs were dropped causing 250 craters which entailed the closing of the airfield. At the time of the report it was not possible to estimate the date of serviceability. 13 FW 190, 3 Ju 88 and 4 Me 408 and 1 Me 108 were destroyed and 17 other aircraft sustained varying degrees of damage. Other damage included 7 huts destroyed and 1 farm building destroyed, 1 hangar and 10 buildings damaged.

> A medium heavy raid was carried out by 25 to 30 single-engined planes from a height of 4000 metres. A carpet of bombs fell on the taxying area and some of the accommodation blocks, leaving about 40 craters. The bombs are reported as being 500 kg. Three aircraft were destroyed and three slightly damaged. The taxying area was again operational in 3 days. Two people were killed and ten slightly injured.

About 800 H.E. bombs were dropped in a blind high altitude attack. Three aircraft hangars were damaged 25%, 70% and 100% respectively and three others were set on fire. Workshops sustained 50% damage, Ten accommodation buildings were damaged 45% and one ammunition building was destroyed. Damage to aircraft was:

13 Ju 88 - 100% and 9 Ju 88 40%.

120 Fortresses and Liberators laid a carpet of bombs at 1520 hours from a height of 5000 metres, 330 of the bombs falling on the airfield. Damage resulted as follows: 90%

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I	90%
II	30%
III	50%
IV & V	10% each.
nodation buildings	suffered 50 - 90%
os fell on the taxy	ving area (no
s fell on the tarms	
gars.	
s fell on workshop:	s and hangars.
s fell on the peri	neter track.
	III IV & V nodation buildings cshops 70 - 80%. os fell on the taxy re scored on the ru s fell on the tarma gars. s fell on workshops

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LECHFELD. As above.

As above.

MEMMINGEN.

As above.

MEMMINGEN

As above.

 $\frac{12 \text{ SEPTEMBER}}{(\text{USAAF})}.$ 

18 NOVEMBER.

18 JULY.

(USAAF)

20 JULY.

(USAAF)

(USAAF)

A heavy raid was carried out by about 250 Liberators in 10 waves, during which 1300 H.E. bombs were dropped, killing 76 and injuring 131. The station and railway installations were severely damaged and 9 Me. 262 and 1 Me. 110 were 60% or more damaged while damage less than 60% was caused to 1 Me. 410, 8 Me. 262 and 2 Me. 163. While still on the railway sidings 3 tank trucks were burnt out as a result of a direct hit and about 1000 litres of C0 were lost.

Between 1220 and 1335 hours some 50 - 60 Mustangs and 35 Thunderbolts attacked and caused considerable damage particularly to Me. 262. "The heavy losses at Leipheim were the subject of a conference at which Gen.Ing. Lucht, Gen. Erdmann and Oberst Petzolt took part. It transpired that the losses were largely attributable to bad dispersal on the part of the firm of Messerschmitt The state of serviceability of the light A.A. suffered through its proximity to the front (250 km). The airfield commander has therefore ordered permanent manning of the 15 MGFF." 17 Me. 262 were destroyed and 20 sustained medium damage.

Between 200 and 250 bombers in 4 waves of 50 - 60 each attacked with 500 kg H.E. and 9 kg fragmentation bombs. The numbers dropped are not given. Most of them fell on the camp hitting workshops, hangars, accommodation blocks and destroying 26 aircraft and damaging 30 more. Casualties amounted to 170 dead and 140 injured. On 22 localities nearly 95 H.E. bombs were dropped killing 29 and injuring 19.

This raid was carried out by some of the force which visited Friedrichshafen area. About 400 H.E. and 500 fragmentation bombs were dropped. Casualties in the town and at the airfield amounted to 47 dead and 84 injured. In the town the station and slaughterhouse were severely damaged. At the airfield 75% of all the

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<u>MERZHAUSEN.</u> E. 970 – LGK XIV. (USAAF)

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hangars, buildings and installations were hit. 40 aircraft were destroyed and 30 more were damaged. 

incendiary bombs which caused 6 - 700 craters on the taxying and landing areas and put the flare path installations out of action. Further damage included 15 FW 190 slightly damaged and 1 staff car, 2 starter motors, 60 fuel filling hoses destroyed. It was estimated that an emergency landing area and the perimeter track would be available in 2 days and the flare path lighting in
in 2 days and the flare path lighting in $8 - 10$ days.

<u>OBERPFAFFENHOFEN</u> . 8a 2341 - IGK VII War Diary.	<u>13 APRIL</u> . (USAAF)	Works Airfield: 10 - 12 formations each of 15 aircraft attacked from 1500 - 1535 hours at a height of 4000 - 7000 metres. At the same time a low level attack by about 20 Thunderbolts took place. Three carpets of bombs were laid, 2 in open country. It was estimated that between 20 and 25 aircraft were damaged on the ground. Luftwaffe Airfield: 50 Fortresses, 12 - 15 Mustangs hit 3 hangars and the Radar Research Institute at 1515 hours. 11 Do 217 were destroyed with further damage to aircraft probable.
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OBERPFAFFENHOFEN. As above.	1 <u>3 JUNE</u> . (USAAF)	After this raid the airfield was closed. About 350 - 400 craters appeared in the
	•	taxying area and 16 aircraft including 14 Me. 410 were destroyed. Hangar VI suffered 80% damage, the annex to Hangar IV received a direct hit, Hangar V was seriously damaged. Flying Control was also destroyed by a direct hit.
· · · · ·		
RHEIN-MAIN. E. 970 - LGK XIV.	<u>24 DECEMBER</u> . (USAAF)	Between 1500 and 1525 hours about 800 H.E. bombs were dropped by 100 bombers from a height of 7500 metres. 200 craters appeared in the take-off and landing area and about
		50 in the perimeter track. Three huts were damaged. Electricity (power and light) and water supplies failed as well as telephone facilities. Two ammunition shelters with contents were blown up. Of the 120 dispersed aircraft on the airfield (FW 190, Me 109, Ju 188, He 111, FW 58, Ju 88) 8 were destroyed and 17 damaged. Also 5 lorries and trailers were damaged and a petrol container was burnt out.
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#### ALLIED AIR ATTACKS ON GERMANY - 1944

#### PART III - TRANSPORT CENTRES

AUGSBURG 8a 2341 - LGK VII

War Diary

4 NOVEMBER (USAAF)

Of about 6 - 700 aircraft which penetrated the LGK area to attack transport targets some 80 - 100 dropped 155 H.E. and 6000 incendiary bombs. Slight material damage was caused.

#### DIEDENHOFEN As above

FRANKFURT

970 - LGK XIV

25 MAY (USAAF)

29 DECEMBER

(USAAF)

In one minute at about 0931 hours H.E. and incendiary bombs were dropped on railway installations as well as H.E. bombs on the town centre. The Gas Works were set on fire and a gasometer destroyed. The Intelligence School of the Waffen SS in Sablon was hit killing 9 and injuring a large number of others. Other casualties reported amounted to 15 dead and 20 injured. Losses claimed were 1 Mustang, 1 Fortress II and 1 4-engined aircraft.

About 1500 H.E. bombs were dropped mainly on railway installations. At the chief goods station an ammunition train of 45 trucks was destroyed. The Express goods station and the railway repair works sustained medium damage and some lines were cut. 19 houses were destroyed and 208 were damaged. At the military W/T transmitting station in Schwanheim 4 buildings were destroyed and the firm of Auto-Union was severely damaged. Casualties were 67 dead, 80 injured and 30 unrecovered.

INNSBRUCK 8a 2470 - IGK VII War Diary Data 8a 2330 -

16 NOVEMBER (USAAF)

A medium raid by about 65 aircraft in 6 waves took place and about 500 H.E. and 15 - 20000 incendiary bombs were dropped, damaging chiefly the Central Station and the Pradl sector. Railway installations were very severely damaged and the broadcasting station was put off the air. Two transformer plants were severely damaged. The Central Station and the station at Hoetting were badly damaged and traffic to the south, east and west as well as to Garmisch was seriously affected.

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KAISERSLAUTERN 970 - LGK XIV

KAISERSLAUTERN

FD.2078/45 - ARP.

K'lautern

As above and

14 OCTOBER (USAAF)

Between 1130 and 1330 hours some 2 - 300 bombers with fighter escort carried out an attack on the Railway Repair Works and the Shunting Station, on which a carpet of 60 - 70 bombs were dropped, hitting an ammunition train. A further similar carpet fell on the Guss und Armaturenwerk causing considerable damage. Another carpet of about 100 H.E. bombs fell on the SE edge of the town.

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At 1412 hours an attack was made on the Central Station and the southern part of the town. Three carpets of bombs, totalling 800 (9 D.A.) H.E. and 3000 incendiary bombs were dropped, resulting in 20 major and 100 smaller fires, in which the Central Station was destroyed and several trains including an annunition train were hit. The Goods Station was also damaged. Damage to houses consisted of 53 destroyed and 136 damaged, and casualties were 11 dead and 27 injured.

At about 1245 hours some 500 H.E. bombs (19 duds) and 400 incendiary bombs were dropped on the town and transport installations. The line Ludwigshafen - Saarbruecken was cut. Considerable material damage was caused, 18 houses being destroyed and 188 damaged, and 8 were killed, 10 missing and 14 injured. The station building was badly damaged.

At 1305 hours 380 H.E. bombs were dropped by about 150 aircraft in 3 waves on the goods station, shunting station and on Karlsruhe-Durlach. Electricity supplies in Durlach failed and casualties amounted to 69 dead, 129 injured and 650 homeless. The Gas Works were severely damaged and rendered 100% out of action for 14 days.

At about 1345 hours 1000 H.E. and 10000 incendiary bombs were dropped, the majority of the latter in open country. Considerable damage was

G.H3837(b)/IC/1/57/

970 - LGK XIV

KOBLENZ

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## KAISERSLAUTERN

As above

KARLSRUHE 8a 2341 - LGK VII War Diary

CD. 325 - NSDAP HQ.

27 MAY (USAAF)

4 DECEMBER

(USAAF)

28 DECEMBER

(USAAF)

18 DECEMBER (USAAF)

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done to the suburbs of Ehrenbreitstein, Niederberg, Neuendorf, Neudorf and Immendorf. 30 buildings were destroyed, 50 suffered severe to medium damage and 100 slight damage. Casualties were 16 dead and many injured. The railway line from Niederlahnstein to Neuwied was cut.

Between 1055 and 1130 hours some of the 600 bombers with about 800 fighter escorts reported in the area dropped 8000 H.E. and several 10000 incendiary bombs and drums mainly on transport installations. At the Shunting Station at Inetzel all 54 lines, points, locomotive sheds and workshops were severely hit. The lines to Trier and Cologne were interrupted. The transformer and electricity works at Wallersheim were destroyed.

Between 1848 and 1908 hours about 1200 H.E. bombs were dropped on railway installations, the Shunting Station Moselweiss and Luetzel as well as many other parts of the town. Some lines were closed, severe damage being inflicted on the permanent way. The workshops at Moselweiss were destroyed.

About 700 H.E. and 3000 incendiary bombs were dropped on bridges over the Mosel. A transport train was hit, several coaches being burnt out. Damage was also done to houses and casualties amounted to 7 dead, 4 missing and 14 injured.

Between 1258 and 1344 hours some 8 -10000 H.E., 50 - 60 jet incendiary and 10 - 20000 incendiary bombs were dropped. The Pfaffendorfer road bridge received 16 hits and was closed to traffic. All railway lines from the Central, Luetzel and Moselweiss stations were cut. Electricity and water supplies failed and casualties were 45 dead and 35 injured.

Between 1455 and 1513 hours about 300 Lancasters dropped about 20 carpets, in

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KOBLENZ As above

#### 29 DECEMBER

all 2 - 3000 H.E. bombs of heavy and RESTRICTED

G.H3837(b)/IC/1/57/

KOBLENZ As above

KOBLENZ As above

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KOBLENZ

As above

24 DECEMBER (USAAF)

28 DECEMBER

(USAAF)

22/23 DECEMBER

**10 DECEMBER** 

(USAAF)

- 4 -

very heavy calibre. The Goods Station and town areas of Iuetzel and Moselweiss were severely hit and large fires broke out, particularly in Luetzel. The Old Mosel bridge (tranway) was hit and closed to traffic. The rail bridge over the Mosel was hit 3 times and also closed. Severe damage was reported to the permanent way and all rail traffic was suspended for 48 hours. The main road to Mainz on the left bank of the Rhein was closed and all telephone communications failed.

About 800 H.E. 3000 incendiary, 70 phosphorous and 10 oil bombs were dropped on various parts of the town causing considerable damage to houses, particularly in Bischofsheim. The Goods Station in Bischofsheim was damaged and the line to Frankfurt - Darmstadt was closed. Damage was also caused to workshops at the firm of M.A.N. and at the

Mainz-Wiesbaden Power Station.

Between 1258 and 1350 hours several carpets were dropped by 4 - 500 aircraft mainly on the station, Seckenheim and the shunting and goods station. In all 800 H.E., 200 incendiary and 60 oil bombs were dropped. Severe damage was done to the Central Station, Seckenheim station, the shunting and goods stations. The permanent way was destroyed in many places and rolling stock destroyed or severely damaged. Casualties amounted to 31 dead, 63 injured and 230 homeless.

Some 5 - 600 aircraft attacked the Rhein bridges and railway installations between 1117 and 1140 hours. Other targe's hit included the Mannheim Engine Works and harbour installations. Bombs dropped were 2 mines, 800 H.E., 1000 incendiary and 200 oil and jet incendiary bombs. Casualties amounted to 15 dead, 13 injured and 1800 homeless. The Shunting Station was hit by numerous H.E., interrupting traffic.

MAINZ

970 - LGK XIV E.

**30 DECEMBER** (USAAF)

MANNHEIM 8a 2341 - LGK VII War Diary CD. 325 - NSDAP H.Q.

27 MAY (USAAF)

MANNHEIM 325 - NSDAP HQ. CD.

**3 SEPTEMBER** 

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24. DECEMBER

25 MAY

27 MAY

25 MAY

(USAAF)

(USAAF)

(USAAF)

(USAAF)

MAYEN

METZ

METZ

As above

MUELHAUSEN

8a 2341 - LGK VII

War Diary

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970 - LGK XIV

IGK VII

War Diary

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Some vessels in the harbour were sunk and damaged and the Chief Customs Office severely damaged. Likewise severe damage was caused to the Mannheim Engine Works and one of 3 barracks which were hit.

About 200 H.E. bombs fell on the East Station where the permanent way was damaged afresh. Damage to property amounted to 13 houses destroyed and 80 damaged and 15 were killed, 30 injured and 150 rendered homeless. On 35 country localities about 1000 H.E. and 200 incendiary bombs were dropped on installations. Damage included 5 locomotives knocked out, 67 houses destroyed and 325 damaged. Casualties amounted to 47 dead and 41 injured.

At 0932 H.E. and incendiary bombs were dropped. The railway repair workshops were partially destroyed by 10 H.E. and the oil tank stores at the station were burnt out. The Reserve Hospital suffered severe devastation from 3 direct hits and a brewery was badly damaged. Casualties amounted to 30 dead, including 18 female staff and 3 soldiers at the Air Raid Warning Centre in Metz and 9 injured.

About 200 H.E. and 600 incendiary bombs caused damage to house property etc. and also to the Forbruecken Station which sustained medium damage. Casualties were 8 dead and 28 injured.

About 100 aircraft dropped 500 bombs mainly in the neighbourhood of the North Station. The permanent way and engine sheds were hit but traffic was not interrupted. Damage caused to houses was as follows: 21 destroyed, 20 severely damaged, 105 medium damage and 40 slightly damaged. Two factories were destroyed, the Electricity Works sustained medium damage and the Water Works slight. The Army instruments stores were severely damaged. Three large and four medium fires were started and casualties amounted to 36 dead, 60 injured and 830 homeless.

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MUEIHAUSEN

MUELHAUSEN

As above

CD. 317 - Local Prop. Office <u>3 AUGUST</u>

About 60 aircraft dropped 459 H.E. bombs (22 duds) between 1537 and 1547 hours on the Central Station and inner town, killing 85, injuring 68 and rendering 608 homeless. The Central and Goods stations were severely damaged, disrupting the flow of traffic. Telephone and teleprinter facilities were destroyed. One factory was destroyed and 3 were 80% damaged. 94 houses were destroyed and 464 damaged.

### 11 AUGUST

Between 80 and 100 aircraft attacked from 1138 and 1146 hours, dropping 331 H.E. bombs on railway installations and bridges where much damage was done. Canal banks were also damaged. In addition a 50000 litre oil container of the garrison company was set on fire and a tricot factory was destroyed. Damage to houses consisted of 38 destroyed and 217 damaged and casualties amounted to 36 dead and 17 injured with 605 homeless.

<u>NEUNKIRCHEN</u> E. 970 - LGK XIV 27 DECEMBER (USAAF)

Some 400 H.E. and 1000 incendiary bombs were dropped on the town and railway installations. At the shunting station 150 goods trucks were destroyed. Traffic to Schiffsweiler, Reden and Heinitz was interrupted for 3 or 4 days.

REGENSBURG 8a 2341 - LGK VII War Diary 20 OCTOBER (USAAF)

About 200 aircraft bombed from between 800 and 2000 metres. They dropped about 600 H.E. bombs on the town centre and eastern sector as well as on the barracks and the industrial area. The residential area in the neighbourhood of the station was hit and casualties and damage was medium.

REGENSBURG As above 23 OCTOBER (USAAF)

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Between 400 and 450 bombers with weak fighter escort entered the LGK area from the south. About 200 flew to Regensburg while the balance went to Munich. In Regensburg about 600 H.E. bombs were dropped on railway installations affecting several lines.

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The residential area to the south of the Central Station was affected but no industrial damage was done and damage to houses and casualties were slight.

About 150 aircraft of the 6 - 700 reported in the LGK area dropped 1200 H.E. bombs which had a medium heavy effect on the east of the town, the barracks area and the harbour. At the East Station an ammunition train was hit and partially exploded.

Between 1328 and 1347 hours 925 H.E. and 15 oil bombs were dropped on the goods station. 54 people were killed, 63 injured and 1100 rendered homeless.

About 60 aircraft dropped some 200 H.E. and 15000 incendiary bombs with explosive head, mainly on the districts of St. Johann, Malstadt and St. Arnual. About 50 were killed, 100 injured, 40-50 unrecovered and 4 - 5000 rendered homeless. Widespread fires and destruction are reported in the residential districts and a police barracks was severely damaged. Ten industrial concerns were severely damaged including the Wiegemeier Chemical works. Telephone, water, gas and electricity services failed.

NOTE: The VIII U.S. Air Force Diary of operations shows Saarbruecken railway centre as the target but there is no evidence that any hits were scored on, or damage done to any railway installations.

Some of a force of 150 - 200 bombers dropped 350 - 400 H.E. bombs on Saarbruecken and also Neunkirchen. In Old Saarbruecken and St. Arnual districts some 30 houses were destroyed and 50 damaged and Brown, Boveri & Co. slightly damaged. Casualties were 10 dead and 30 injured. In Neunkirchen damage was caused to houses and railway installations, railway maintenance and workshops and permanent way. The lines to Reden and Schiffsweiler were closed.

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G.H3837(b)/IC/1/57/

4 NOVEMBER (USAAF)

8a 2740 - LGK VII War Diary Data

REGEN SBURG

As above and

SAARBRUECKEN

8a 2341 - IGK VII

War Diary

<u>27 MAY</u> (USAAF)

SAARBRUECKEN E. 970 - LGK XIV 14 OCTOBER (USAAF)

4 NOVEMBER

(USAAF)

SAARBRUECKEN As above

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SAARBRUECKEN As above	<u>9 NOVEMBER</u> (USAAF)	Between 0950 and 1030 hours part of the force of 1200 bombers and 200 fighters which penetrated the LGK area dropped about 4000 H.E. bombs, hitting the old town, St. Johann, Malstadt and the suburbs of Fechingen, Bischmisheim, Scheidt and Sulzbach. Severe damage was caused to the railway installations, particularly at the Goods Station. There was considerable damage to property but only slight casualties as a large number of bombs fell in open country.
<u>SAĹZBURG</u> 8a 2341 - LGK VII War Diary	<u>11 NOVEMBER</u> (USAAF)	About 100 - 120 aircraft attacked chiefly the transport installations with some 300 H.E. bombs.
SALZBURG As above and 8a 2470 - LGK VII War Diary Data	<u>17 NOVEMBER</u> (USAAF)	About 150 aircraft dropped some 800 H.E. bombs, mainly on the Central Station and residential quarters. The Central Station and two other stations sustained medium damage and the Zeisacher Bridge received a direct hit.
TRIER 8a 2341 - LGK VII War Diary	<u>27 may</u> (USAAF)	At 1310 hours 180 H.E. bombs were dropped hitting a goods train and destroying the south bridge over the Mosel. 18 houses were destroyed, 20 sustained severe and 200 slight damage. 33 people were killed. 14 aircraft are claimed as shot down and 2 probables. These include 10 Fortresses, 1 Thunderbolt and 3 4-engined aircraft.
TRIER E. 970 - LCK XIV	4 NOVEMBER (USAAF)	Between 1404 and 1438 hours numerous H.E. bombs fell on the station and surroundings, the electricity works, the railway repair works and the west and south of the town. Hits were scored on barracks and the Engineers Park in Trier West.

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G.H3837(b)/IC/1/57/

## ALLIED AIR RAID DAMAGE - DECEMBER, 1944

Note:- The following is taken from a document issued by the Ministry of Economics (E.1323). Figures shown against towns in small type are included in the figures against towns shown in block capitals, next above.

Ministry of Economics	is in sual. B	ombs dropp			-	ises dama		Ind. & pul			Casualti	es
Regional Office Area.	Mines	H.E.	Incend.	Total	Heavy	Medium	Light	Destroyed	Damaged	Dead	Injured	Homeless
BERLIN	18	2097	6200	102	459	740	3779	14	92	322	<b>3</b> 8 <b>3</b>	9350
BREMEN	61	4997	93089	254	581	761	3756	5	35	208	386	650
Osnabrueck	33	2402	77437	211	5 <b>3</b> 7	591	3277	5	29	52	89	650
DUESSELDORF	369	25259	232922	2399	4176	6659	29917	20	361	1265	1995	-
Duisburg	30	2141	31100	446	866	1384	5497	2	66	88	161	-
Essen	13	4535	64,000	292	455	702	2702	1	30	350	285	-
Oberhausen	54	4579	58200	625	868	1693	7575	3	47	74	173	-
Opladen	56	1352	800	168	315	669	2456	2	21	102	183	-
FUERTH	8	8203	2791	209	433	345	1114	23	<b>1</b> 18	238	411	4653
HANOVER	47	4475	21892	304	300	<b>3</b> 59	1211	12	55	148	297	7625
Hanover	25	2430	20500	285	258	325	1102	10	38	98	1 38	<b>71</b> 70
KARLSRUHE	79	7069	71:576	1246	* 1695	3076	7528	84	181	652	1071	<b>3</b> 0345
Karlsruhe	55	2307	51021	1007	1 302	2503	5210	58	60	334	<b>3</b> 94	24800
KASSEL	96	12495	224376	434	509	570	2833	17	106	1100	747	8780
Kassel	-	850 <b>3</b>	220000	277	264	290	1 <b>1</b> 48	14	88	318	618	7350
KATTOWITZ	-	<b>1105</b> 8		111	39	421	1385	5	30	290	408	124,O
KOELENZ	-	22127	135650	679	1607	<b>3</b> 12 <b>3</b>	5029	3	53	245	327	550
Trier	-	8200	-	535	1045	3070	4850	-	42	78	180	-
COLOGNE	178	20332	107960	1535	28 <b>47</b>	3813	8117	41	251	607	1159	-
Bonn	10	1761	37250	398	702	1004	2268	5	<b>3</b> 9	148	415	-
Euskirchen	-	4462	18200	353	410	140	1270	6	94	25	54	-
Cologne	29	6958	26270	183	-* 246	158	577	8	<u>3</u> 2	39	52	-
LINZ	-	4111	-	242	227	377	2160	15	45	200	282	7799
MAGDEBURG	117	9034	8940	471	<b>"</b> 690	1794	4816	11	147	152	295	10415
Merseburg-Leuna	100	4600	3000	386	58 <b>3</b>	159 <b>3</b>	24,04	5	73	87	185	9600
MUNICH	75	2628	78000	803	483	49 <b>3</b>	635	62	220	543	1091	59500
Munich	75	1100	7800	763	481	491	612	62	206	452	909	59000
MUENSTER	274	16444	151073	2171	. 2754	3447	12885	47	415	1161	2500	-
Soest	10	3000	26000	1049	645	448	888	1	34	175	222	-
SAARBRUECKEN	<b>3</b> 5	6179	18621	344	564	936	<b>33</b> 59	10	120	297	513	9770
SALZ BURG	-	10298	18250	521	666	901	2644	40	217	582	877	9032
STUTTGART	63	76 <b>3</b> 6	332201	6928	1685	2314	<b>3</b> 910	192	221	5642	2356	71340
Heilbronn	42	3000	201 500	5000	750	800	500	119	65	4966	1411	35000
			ł				1		1			

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Ministry of Economics	Be	ombs dropp	ped	Dwe	lling hou	ises dama	uged	Ind. & pul	b. bldgs.		Casualti	les
Regional Office Area	Mines	H.E.	Incend.	Total	Heavy	Medium	Light	Destroyed	Damaged	Dead	Injured	Homeless
Ulm	11	1545	94970	1619	414	771	1706	64	72	504	563	30000
VIENNA	-	5016	73475	227	379	282	2149	18	111	373	518	5026
WIESBADEN	31	11637	36145	3300	1005	1002	2991	46	87	1000	1286	6770
Giessen	10	1454	14000	2715	512	125	1200	32	11	188	290	500
	:											·····
TOTAL:	1451	191095	1614161	22280	21099	31413	100218	665	2865	15025	16902	242845

- 2 -

## G. 3837(c)/DOP/2/57/

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#### ALLIED AIR ATTACKS ON GERMANY - 1944

## LOCATION INDEX

			Appendix B A.H.B.6 Tr No. VII/16	anslation
	Note: Dates followed by (A) Centres respectively.	o <b>r (T)</b> de	enote raids on Airfields or Tra	nsport
		•		
	Locations		Dates of Raids	
	Aschaffenburg		21st/22nd November	
	Augsburg	anda an shekara shekar Shekara shekara	25th February, 25th/26th Febru 16th March, 13th April, 4th No	uary, wember (T)
	Berlin	18/29 Jan:	1st/2nd January, 2nd/3rd Janua 20th/21st January, 27th/28th J 30th/31st January, 29th April, 8th May, 19th May, 24th May, 2	anuary, 7th May,
	Biblis	••	24th December (A)	
	Bielefeld		30th September	
	Bonn		4th March	
	Brandenburg	ster i de	18 Oct.: 18/29 Nec. 6th August	and the state of the state
,	and the state of the			er, The states
	Brunswick	· · ·	14th/15th January, 30th Januar 10th February, 15th March, 22r 22nd/23rd May, 14th/15th Octob	a/25 April,
(† sta	Cologne	τ. - Ελ	20th/21st April, 15th October, 30th/31st October, 31st October, November, 20th/21 December, 22 December, 30th/31st December	28th October er/1st th/25th
			25th/26th August, 11th/12th Se 12th December, 24th December (	aptember, (A)
	Diedenhofen		25th May (T)	
·	Dortmund		22nd/23rd May	
			22nd/23rd April, 2nd/3rd Nover	•
			21st/22nd May, 30th November/ 1st December	
	Erbenheim	en e	(0th Norombon (A)	1 1 <sup>2</sup> .
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Locations	Dates of Raids
Essen	23rd/24th October, 25th October, 12th/13th December
Ettinghausen	24th December (A)
Frankfurt	24th January, 18th/19th March, 22nd/23rd March, 12th/13th September, 25th September, 5th November, 11th December, 29th December (T)
Friedrichshafen	18th March, 27th/28th April, 20th July
Gaggenau	10th September, 3rd October
	12th/13th June, 14th/15th June
	6th/7th December, 24th December (A)
Halberstadt	11th January
	18th June, 20th June, 28th/29th July, 6th August, 25th October, 4th November, 11th/12th November, 21st November, 31st December
Innsbruck	16th November (T)
Kaiserslautern	14th October (T), 18th December (T) 28th December (T), 30th December
Karlsruhe	24th/25th April, 27th May (T), 9th August, 5th September, 8th September, 26th/27th September, 5th November
Kassel	19th April
	4th January, 5th January, 22nd May, 6th July, 23rd/24th July, 16th/17th August, 26th/27th August, 30th August, 15th/16th September
Klagenfurt	31st January 9th October, 6th/7th November,
	9th October, 6th/7th November, 4th December (T), 10th December (T), 22nd/23rd December (T), 24th December (T), 28th December (T), 29th December (T)
Lachen-Speyerdorf and a distance way	27th May (A)
Langendiebach	10th November (A)
t acheola Tacheola	13th April (A) 12th September (A)
Leipheim	18th November (A)
A State of the second sec	/Leuna

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	Locations	Dates of Raids
	Leuna	12th May, 28th May, 7th July, 20th July, 28th July, 29th July, 24th August, 11th September, 13th September
	Leverkusen	26th October
	Ludwigshafen	7th January, 27th May, 31st July, 3rd September, 8th September, 25th September, 19th October, 5th November
	Madgeburg	21st/22nd January
• • •	Mainz	8th September, 9th September, 121 21st September, 19th October, 18th December, 30th December (T)
7 g 7 -	Mannhëim	27th May (T), 14th August, 3rd September (T), 9th September, 19th October, 5th November, 15th/16th December
•	Mayen	24th December (T)
		18th July (A), 20th July (A)
·	Merzhausen	24th December (A)
	Metz	25th May (T), 27th May (T)
	Muelhausen	25th May (T), 3rd August (T), 11th August (T)
		4th November, 16th November,
	and a start of the s Start of the start of	22nd November, 26th/27th November, 17th/18th December
	Neunkirchen	17th December (T)
	Nuremberg	25th February, 30th/31st March, 10th September, 3rd October, 19th/20th October
	Oberhausen	18th/19th August, 6th October, 6th November, 21st/22nd November
	Oberpfaffenhofen	13th April (A) 13th June (A)
	Oschersleben	11th January
	Osnabrueck	13th September
	·	/Regensburg

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		300 TO 00 J	
Locations		Dates of Raids	
Regensburg		25th February, 20th October (T), 23rd October (T), 4th November (T), 20th December, 28th December	•
Rhein-Main	nation di A	24th December (A)	
Rostock		20th February, 11th April, 4th August, 25th August	
Ruesselsheim		20th July, 12th/13th August, 25th/26th August	
Saarbruecken		27th May (T), 28th June, 13th July, 16th July, 5th/6th October, 14th October (T) 4th November (T), 9th November (T)	)
Salzburg	· · · · · · · ·	11th November (T), 17th November (T)	
Schweinfurt		24th/25th February, 13th April, 26th/27th April, 19th July, 9th October	
Stettin		5th/6th January, 20th June, 17th August, 30th August	
Steyr		2nd April	
Strassburg		27th May, 11th August, 25th September	
<u>Stuttgart</u>	i i i i i i i i i i i i i i i i i i i	20th/21st February, 1st/2nd March, 15th/16th March, 24th/25th July, 25th/26th July, 28th/29th July, 12th/13th September	
Trier Jroundorf		27th May (T), 4th November (T), 21st December 29/30 Wee:	
Wesermuende		18th/19th September	
Wesseling		21st/22nd June, 18th/19th July	
Wiener-Neustadt		29th May	
Wilhelmshafen		15th/16th October	
		· · · ·	
••	й Алана (1997) Алана (1997) Ал		
		n an de la companya d	
		4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	

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# ALLIED AIR ATTACKS ON GERMANY - 1944 CHRONOLOGICAL INDEX

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Appendix C to A. H. B. 6 Translation No. VII/162 i sa

· · · · · (A) or (T) after a place name indicates that the raid was against an airifeld or transport centre respectively at that place. Note:

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Dates	(1,1)	Locations	
en aleministration in a state film and a print and	•		
January			,
1/2		Berlin	
2/3		Berlin	
4	1971 - 1971 - 1975 1971 - 1971 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 - 1975 -	Kiel	
5		Kiel	•
5/6	interación e la facta.	Stettin	
7		Ludwigshafen	a star
11	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Halberstadt, Oscherleben	چيند ب
14/15		Brunswick	
20/21		Berlin	
21/22		Magdeburg	
24	• • •	Frankfurt	:*
27/28	}	Berlin	1888 (Sec. 1997) 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
30/29	🤾 e star y eestat seed oor	Brunswick	
30/31	•	Berlin	
31	ata ang sa	Klagenfurt	· · · · ·
February			
10		Brunswick	
			1. A. A.
20		Rosteck	
20/21	19 <b>4</b> 1 - 1	Stuttgart	
24/25		Schweinfurt	
25		Augsburg, Nuremberg, Regens	
25/26		Augsburg	÷
	t dal sejaal		Marrah
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ee frijnen en in **ee 2 e** feit op de station Frijnen aantijne<sub>t</sub> Skat<sup>an</sup>

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larch			r
/2	and the second	Stuttgart Bonn	n (n. 1997) Ar Angelan
	en de la construction de la constru La construction de la construction d	Brunswick	·* · ·
5	and the second		
15/16		Stuttgart	
		Augsburg	
18		Friedrichshafen, Munich	
18/19		Frankfurt	•
22/23	1	Frankfurt	ŗ.
30/31		Nuremberg	
April			
2 - Although A	•		
11		Rostock	
13	·	Augsburg, Lechfeld (A), ( Schweinfurt	)bepfaffenhofen (A
40	$\epsilon_{i}$ , $\cdot$ , $\cdot$	Kassel	
19			
20/21	ा निष	Cologne	
22/23	<b>e</b> 19 an 19	Brunswick, Duesseldorf	
24/25	:	Karlsruhe, Munich	$= A_{i} \chi_{i}^{-1}$
26/27		Schweinfurt	
27/28		Friedrichshafen	
29		Berlin	
	····· /1		
May	n;		1.
7		Berlin	
8		Berlin	
12 · · · · · · · · · · · · · · · · · · ·	n The test the state of	Leuna	
19	10 g* 1	Berlin	
21/22	· : •	Duisburg	
22		Kiel	/22

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	Dates	a da es	Location	
<u>Ĝ</u>	22/23	tott and the second	Brunswick, Dortmund	÷ }
3		an dae an 17 mars an	Berlin	•
	25		Diedenhofen (T), Metz (T	), Muelhausen (T)
	27		Karlsruhe (T), Lachen-Sp Ludwigshafen, Mannheim ( Saarbruecken (T), Strass	
	28	direction of		$X_{i}^{A}$
	29	30	Wiener-Neustadt	<u></u>
	June	n Maria ganas		
	9	101 m	Munich	17 Q
	12/13		Gelsenkirchen	1 <u>1</u>
	13	•	Munich, Oberpfaffenhofen	(A)
	14/15		Gelsenkirchen	i stati
3	18		Hamburg	•
ŝ	20	$M = K_{\rm e}$	Hamburg, Stettin	4
	21		Berlin	
	21/22		Wesseling	11
	23/24	n Ƴa san san san san san san san san san sa	Bremen	
	24	and the second sec	Bremen	•
	28	i star	Saarbruecken	
	July	DE Corres		· .
	6	$(x_{1}, \dots, x_{n}) \in \mathbb{R}^{n} \to \mathbb{R}^{n}$		÷ 1
	7		Leuna	••
<u>.</u>	11	- # # 	Munich	ξį.
~	12	•		ad in the second se
¢.	13	· · · · · · · · · · · · · · · · · · ·		
	16		Munich, Saarbruecken	
	18		Memmingden (A)	and the second sec
	18/19	ta da la companya di seconda di s	Wesseling	/19
		RES	TRICTED	/17

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Date		Location	
19		Munich, Schweinfurt	1224
20	- CINERAL AL CONTRACTOR STATE	Friedrichshafen, Leuna, Memming Ruesselsheim	en (A),
21	y w <mark>la k</mark> a ka k	Munich	
23/24		Kiel	
24/25	n a frittan 1999 an an gart frittan an Anna an Anna. An an Anna an an an an an an Anna an Anna Anna Anna. An	Stuttgart	
25/26	J. Nor	Stuttgart	
28	1997 - Maria Barris, 1997 - 1998 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997	Leuna	<i>.</i> .
28/29		Hamburg, Stuttgart	: A <sup>*</sup>
29	•	Bremen, Leuna	
31	•••	Ludwigshafen, Munich	
· ·			:
August	$\frac{1}{2} = \frac{1}{2} \left( \frac{1}{2} + \frac{1}{2} \right) \left( \frac{1}{2}$	Marshauran (M)	
3	· · · · · ·	Muelhausen (T)	
4	11、武武武王 (1995)	Rostoak	
6		Brandenburg, Hamburg	÷.
9			8.NP
11		Muelhausen (T), Strassburg	
12/13	. a. *	Ruesselsheim	
14	1. 1. March 11.	Mannheim	÷.*
16/17		Kiel	
17		Stettin	· 1.
18/19	. <b></b> .	Bremen, Oberhausen	· ·
24		Leuna	
25		Rostock	
25/26		Darmstadt-Griesheim, Ruesselsh	eim
26/27	ned <b>o</b> n Maria - Paris	Kiel	
30		Bremen, Kiel, Stettin	• *
September			2 <b>2</b>
	<b>દ</b> ે	Ludwigshafen, Mannheim (T)	
3			/5

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त्रे	Date	Location	
,	5	Karlsruhe	
ġ	8	Karlsruhe, Ludwigshafen, Mainz	
	9.	Mainz, Mannheim	08/61
	10	Gaggenau, Nuremberg	
	11	Leuna	3 <sup>1</sup>
	11/12	Darmstadt-Griesheim	
	12	Lechfeld (A)	
	12/13	Frankfurt, Stuttgart	•
	13	Leuna, Osnabrueck	
	15/16	Kiel	1. 1
	18/19	Wesermuende	and the file
	21	Mainz	
Ā	22	Munioh	
è	<b>25</b>	Frankfurt, Ludwigshafen, Stras	sburg
	26	Bremen	1 2 1
	26/27	Karlsruhe	
	30	Bielefeld	
			: 
	October		
	3	Gaggenau, Nuremberg	45 -
	<b>4</b> to the <b>P</b> of the test	Munich	• }
	5/6	Saarbruecken	• •
	6	Oberhausen	s e N P
	6/7	Bremen	
4	9	Koblenz, Schweinfurt	
ġ.	12	Bremen	÷.
	14	Kaiserslautern (T), Saarbrueck	<b>cen (T)</b>
	14/15	Brunswick	
	15	Cologne	•
	$\sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i$		/15/16
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Date		Location	
15/16	$m \to \infty N$	Wilhelmshafen	$C_{\rm eff}$
/ <b>8</b> net , ne 19	· · · · · ·	Bonn Ludwigshafen, Mainz, Mannheim	
19/20	the suma of states. States	Nuremberg	
20	10. (1 <b>. 11. 11. 1</b> . 11. 11. 11. 11. 11. 11. 11	Regensburg (T)	
23	_ <b>1</b> 4	Regensburg (T)	•
23/24	1 - Friday Constant	Essen	•
25	(1,1) = (1,1)	Essen, Hamburg	
26	alan tanàn ang Kalang K	Leverkusen	
28	Allaria 🧠 🕴	Corogne	
30/31	And	Cologne	
31/1 Nov.	and the first state	Cologne	
			•
November	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
2/3 million and said said	•	Duesseldorf	:
4	÷.	Augsburg, Hamburg, Munich, Rege Saarbruecken (T), Trier (T)	nsburg(T),
5	e i krisk Statist	Frankfurt, Karlsruhe, Ludwigsha Mannheim	ufen,
6		0berhausen	
6/7		Koblenz	•
9	an éta an saara sara sara	Saarbruecken (T)	
10	ring), ar	Erbenheim (A), Langendiebach (A	A)
11	$I = \{ \boldsymbol{\ell}_{i}, \boldsymbol{\ell}_{i}, \boldsymbol{\ell}_{i}, \boldsymbol{\ell}_{i} \}$	Salzburg (T)	· .
11/12	an a	Hamburg	
16	2019 - 12 1	Innsbruck, Munich	• •
17	and the state of the state	Salzburg (T)	
18		Leipheim (A)	
21	(1) - a andraati	Hamburg	••
21/22	••••••••••••••••••••••••••••••••••••••		25.11
		Aschaftenburg, Obernausen	
22		Aschaffenburg, Oberhausen Munich	

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Location 26/27 Munich 30/1 Dec. Duisburg December Koblenz (T) Giessen Koblenz (T) Frankfurt Darmstadt-Griesheim 12/13 Essen 15/16 Mannheim 17/18 Munich Kaiserslautern (T), Mainz Regensburg Cologne 20/21 Trier Koblenz (T) 22/23 Biblis (A), Darmstadt-Griesheim (A), Ettinghausen (A), Giessen (A), Koblenz (T) Mayen (T), Merzhausen (A), Rhein-Main (A)

Kaiserclautern (T), Koblenz (T), Regensburg Boun Frankfurt (T), Koblenz (T) serslattern, Mainz (T)

Cologne

Cologne

Neunkirchen (T)

Hamburg

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