THE UNITED STATES
STRATEGIC BOMBING SURVEY

BUSSING NAG FLUGMOTORENWERKE G m b H BRUNSWICK, GERMANY

AIRCRAFT DIVISION

JANUARY 1947

THE UNITED STATES
STRATEGIC BOMBING SURVEY

BUSSING NAG FLUGMOTORENWERKE G m b H BRUNSWICK, GERMANY

AIRCRAFT DIVISION

DATES OF SURVEY:
8 MAY 1945—21 MAY 1945
FIRST EDITION 12 SEPTEMBER 1945
SECOND EDITION JANUARY 1947

This report was written primarily for the use of the U. S. Strategic Bombing Survey in the preparation of further reports of a more comprehensive nature. Any conclusions or opinions expressed in this report must be considered as limited to the specific material covered and as subject to further interpretation in the light of further studies conducted by the Survey.

This edition has been reproduced by a photolithographic offset process from the first edition of the report. To expedite, standardize and clarify the printing of this and other European reports, minor changes have been made on the cover, title page and some drawings.

Foreword

The United States Strategic Bombing Survey was established by the Secretary of War on 3 November 1944, pursuant to a directive from the late President Roosevelt.

The officers of the Survey were:

Franklin D'Olier, Chairman.
Henry C. Alexander, Vice-Chairman.

George W. Ball,
Harry L. Bowman,
John K. Galbraith,
Rensis Likert,
Frank A. McNamee, Jr.,
Paul H. Nitze,
Robert P. Russell,
Fred Searls, Jr.,
Theodore P. Wright, Directors.

Charles C. Cabot, Secretary.

The Table of Organization provided for 300 civilians, 350 officers and 500 enlisted men. The Survey operated from headquarters in London and established forward headquarters and regional headquarters in Germany immediately following the advance of the Allied armies.

It made a close examination and inspection of several hundred German plants, cities and areas, amassed volumes of statistical and documentary material, including top German government documents; and conducted interviews and interrogations of thousands of Germans, including virtually all of the surviving political and military leaders. Germany was scoured for its war records which were found

sometimes, but rarely, in places where they ought to have been; sometimes in safe-deposit vaults, often in private houses, in barns, in caves; on one occasion, in a hen house and, on two occasions, in coffins. Targets in Russian-held territory were not available to the Survey.

Some two hundred detailed reports were made. During the course of its work, the Survey rendered interim reports and submitted studies and suggestions in connection with the air operations against Japan.

While the European War was going on, it was necessary, in many cases, to follow closely behind the front; otherwise, vital records might have been irretrievably lost. Survey personnel suffered several casualties, including four killed.

The Survey studied the effects of the air attack on Japan and further reports have been submitted to the Secretary of War and the Secretary of the Navy.

AIRCRAFT DIVISION

PLANT REPORT NO 1

BUSSING-NAG FLUGMOTORENWERKE G.m.b.H

BRUNSWICK, GERMANY

TABLE OF CONTENTS

BUSSING - NAG FLUGMOTORENWERKE

I SUMMARY

1. Bussing-NAG Flugmotorenwerke G.m.b.H located in QUEREN, a suburb of Brunswick, (Braunschweig), Germany, covers approximately 120 acres of which 126,933 sq ft are utilized for buildings. Of a total of 83 buildings, 12 were vital to production. A Daimler-Benz licensee, it built DB-601 aero-engines through April 1942, when it changed over to production of the more powerful DB 605. Small quantities of the DB-606 (double 601) and DB-610 (double 605) were built also. The last two engines were accounted as double engines in production schedules of the Bussing-NAG firm which was one of the principal suppliers of engines to the Erla, Regensburg and Wiene-Neustadter aircraft industrial complexes which produced the ME-109 fighter.

a. Bussing-NAG accounted for approximately 25 per cent of the total Daimler-Benz engines produced. Peak production was 655 engines in April 1944. Production was on a generally ascending scale from 1939 until the Eighth AF raid of 5 August 1944. Average annual monthly production of aircraft engines was: 1939, 58; 1940, 101; 1941, 143; 1942, 208; 1943, 345; 1944 (January through July), 574.

b. Following RAF and Eighth AF attacks in the Brunswick area early in 1944, work on the dispersal of the factory was commenced and was 75 per cent complete by the time of the first direct attack on the plant by the Eighth AF in August. The dispersal plan created major problems in production and stock control, increasing the total number of employees, and caused a serious dilution of supervisory personnel. Furthermore, the transportation problem became acute. Physical wear and tear of equipment caused, first, by transportation and installation by unskilled labor, and, second, by chemical reaction in underground salt mines, added to the Bussing-NAG management's troubles. Dispersed test stands delayed final engine delivery because of the time lost in transporting the finished engines back and forth.

2. Attack Data.

Date	Air Force Attacking	No of Aircraft attacking.	Bombs dropped: tonnage.	Number of Hits
5 Aug 1944	Eighth AF	95	257	125 HE 1000 IB
24 Aug 1944	Eighth AF	99	280	100 HE 2000 IB
9/10 Sept 1944	R A F	1	1	1 land mine

3. Visible bomb damage was extensive. Bussing-NAG was required to make detailed reports on the attacks, and a summation of these is included in EFFECTS OF BOMBING.

a. A series of three attacks within a month's time, the first two by the Eighth AF in August 1944, followed by a night raid by a lone RAF bomber in early September, caused extensive damage and, in some instances, complete destruction of certain buildings. As a result, the net production, August through November 1944, when full production was again almost in effect, was 1,620 instead of a possible 2,400 engines- a loss of 780. Cutting of power lines, gas, and water, delayed resumption of production. Finished engines and finished components were destroyed. Engine test stands were found to have been one of the most vital points of attack. Damage and destruction of test stands resulted in a delivery bottleneck and caused disruption of production flow.

(1) These three attacks were responsible for a loss of about one month's output and RM 12,000,000 damage. From one to six weeks' cleanup work was required to repair and re-equip damaged structures depending upon the importance of the building and amount of damage.

b. Planned engine production according to plant officials was 600 per month and this quota was being met through July 1944. As a result of the attacks, production for the third quarter fell 27 per cent and full recovery was not attained until November when 585 engines were turned out.

(1) Many man-hours (actual figures were unobtainable) were lost due to air raid alerts, constructing shelters, training wardens and air raid discipline practice drills.

4. Pre-raid Intelligence was generally correct in identification of buildings, their use and size as well as the estimate of the number of employees.

a. It was stated by plant officials that disorganization of transportation with its resultant interferences in the steady flow of component parts and accessories caused more disruption to production schedules than did direct bombing.

II THE PLANT AND ITS FUNCTION IN ENEMY ECONOMY

1. Bussing-NAG Flugmotorenwerke G.m.b.H. a licensee of Daimler-Benz, manufactured DB-601 and DB-605 aircraft engines and was one of the main suppliers of the Wiener-Neustadter, Erla and Regensburg Messerschmitt aircraft industrial complexes.

a. The DB-601 is a 12-cylinder inverted V, liquid-cooled engine. The DB-605 is similar except increased bore raised the displacement from about 2070 cu ins to about 2260 cu ins, maximum HP to 1550 PSI (1530 HP) at 2800 rpm. Weight of approximately 1400 lbs remained the same.

b. All copies of the planned production schedules were destroyed at the factory by order of the German air ministry; however, the average production was about 600 engines per month until the Eighth Air Force attacks began 5 August 1944. This production quota is the team's estimate based upon fragmentary official records which it was able to piece together.

2. Physical Description of the Plant.

a. The plant is located at Steinriedendamm 15, Querum, a Brunswick suburb about three miles from the center of the city. It consists of 83 buildings of which 12 were of vital importance. Plant area totals approximately 120 acres. For the most part, buildings are brick load-bearing wall, concrete floor, steel truss, north light type. Exhibit A is a plant layout chart which illustrates the flow of production within the factory.

b. Electric power was obtained from Hanover-Brunswick Stromversorgung A.G. Brunswick. Two overhead, and one underground, lines fed power into the plant. (Exhibit B indicates consumption of power from 1939-1945). Both water and gas were supplied by the Brunswick municipal plant. Rail sidings ran directly into the factory grounds.

3. Although manufacturing Daimler-Benz aero-engines under license, Bussing-NAG was independently owned. Mr. Gotthard Quarg, general manager, and Mr. Gueler, director of production, were the principal men interviewed. They were both co-operative and under their direction plant personnel prepared the factual data which is the basis of this report.

4. During 1943 between 6,000 and 7,000 workers were employed. Shortly before the American occupation on 31 March 1945, the employment level stood at approximately 6,520, of which about 4,180 were foreign workers and prisoners of war. Normal operation called for two 10-hour shifts, but some departments employing women worked three eight-hour shifts. Exhibit C sharts the total employees by quarters from 1939 through the first quarter of 1945.

5. The Bussing-NAG, Brunswick plant was attacked as follows:

BOMBING-EFFORT

(From Air Force Records)

TARGET	LOCATION	LATITUDE	LONGITUDE
BRUNSWICK		5215 N	1030 E

Air Force	Date of ATTACK	Time of Attack	Type of Aircraft	No. of Aircraft	Altitude of Release	Sighting	Visibility	Priority	BOMBS DROPPED Type	Number	Size	Tons	FUSING Nose	Tail
RAF	10/2/41			1					HE	2	500	1		
									IB	120	4			
8th AF	30/1/44	1158		491	21000	PFF &	Poor	PT	HE	167	500			inst Cl
		1227			26800	not ind.	Cloud	ST	HE	41	500			asst: 4
									HE	405	500		0.1	sec plus 0.01
									HE	1903	500		0.1	0.025
									HE	200	500	680	0.1	inst
									IB	8015	100			
									IB	240	100x4	337		
		1228		19	19900	PFF	Poor	PT	HE	180	500	48	0.1	0.1
									HE	10	500			asst: 4
														sec plus
		1158		140	20000	PFF &	Poor	PT	HE	894	500	289	0.1	0.01
		1230			25100	not ind.	Cloud		HE	258	500		0.1	0.025
									IB	1558	100			
									IB	146	100x4			
									IB	12	128x4	94		
RAF		1953		4	26500				HE	14	500	4		
8th AF	21/2/44	1335		28	12500	Not ind.	Poor	PT	HE	270	500	68	0.1	0.01
		1406		32	23500	PFF	Poor	PT	HE	317	500	79	0.1	0.01

BOMBING-EFFORT

(From Air Force Records)

TARGET	LOCATION	LATITUDE	LONGITUDE
BRUNSWICK		5215 N	1030 E

Air Force	Date of Attack	Time of Attack	Type of Aircraft	No. of Aircraft	Altitude of Release	Sighting	Visibility	Priority	BOMBS DROPPED				FUZING	
									Type	Number	Size	Tons	Nose	Tail
8th AF	5/8/44	1318		33	22000	VIS	Not ind.	PT	HE IB	443 278	100 500	22 70	inst	0.025
		1318 1336		69	23100 23600	VIS	Not ind.	PT	HE HE IB	853 4 562	100 500 500	 44 140	inst 0.1	0.025 0.025
8th AF	24/8/44			4			Not ind.	PT	HE	8	500	2	inst.	0.01
RAF	9/9/44	2257		39					HE HE	50 24	500 4000	61		
8th AF	14/1/45	1312 1349		180	21500 25700	Visual	Not ind.	PT ST	HE HE HE HE HE	682 548 674 157 3	250 500 500 1000 2000	478	0.1 0.1 0.1 0.1 0.1	0.01 0.025 0.01 0.025 0.025

III EFFECTS OF BOMBING

1. Physical Damage.

a. Visible damage was extensive. Bussing-NAG was required to report each attack in detail. Below are copies of these reports:

(1) *Raid of 21 February 1944

Plant was the target, but was not hit. Following are the effects of the bombing that caused considerable loss of production:

(a) Absenteeism caused by bombed-out workers.

(b) Requisitioning of plant personnel for outside emergencies.

(c) Temporary loss of electric power.

(d) Total loss of gas.

(2) Raid of 5 August 1944

Attack lasted from 1330 to 1345 hours, and was carried out by 120 bombers in three waves, which dropped approximately 150 HE bombs and 1,000 mixed-type incendiaries. Sixty-six hits of liquid incendiaries were definitely observed.

Power - Total loss of high voltage lines. The electric cable system within the plant was interrupted at many places by HE bombs.

Water - Total loss of town supply. Extensive damage to the water supply system within the plant.

Gas - Total loss of town supply.

Production - Fifteen per cent direct loss. Temporary loss of production through interrupted power lines.

Assembly hangar was hit by two HE bombs and installations had to be moved to Workshop C.

Severest damage was done to the test stands.

Damage to buildings estimated in percentages

Stockrooms	50%
Mechanical workshops	2%
Assembly and reassembly	15%
Test stands	66%
Repair shop (wood construction)	100%

Damage to rail connections - 10%

Damage to finished products

Ninety engines on the assembly line were totally destroyed; 15 per cent of monthly production.

Damage to finished components

Destruction of half of the main stockrooms and damage to the assembly and reassembly caused considerable loss of components, but no loss of production.

Estimated loss of production (150-180 engines) from attack of 5 August 1944: 25 to 30 per cent.

Estimated amount of damage in RM: 10 million.

Production in the mechanical workshops was interrupted for three to four days and assembly was stopped for five to six days.

Test stands. Twenty-three test stands were destroyed. The repair of the remaining 11 test stands took five to six days.

(3) Raid of 24 August 1944

Attack lasted from 1120 to 1145 hours, and consisted of seven waves of bombers, which dropped 250 HE bombs and thousands of incendiaries.

Loss of production through combined raids of 5 August 1944 and 24 August 1944: Approximately one month (500 to 600 engines).

Time needed for cleanup: One to six weeks, according to importance of buildings.

Estimated amount of damage in RM: 12 million.

Additional damage was done to buildings. The test stands were further damaged by several direct hits. Streets, as well as power and water lines were severely damaged.

(4) Raid of 9 September 1944

Attack occurred at 2300 hours. The assembly hangar including installations and machines, was completely destroyed by an air mine. Material and component parts for 75 engines were destroyed. Loss of production is estimated to be at least 10 days, equivalent to approximately 200 engines.*

2. Production Loss.

a. Planned production according to plant officials was to be 600 engines per month and this goal was being met through July 1944. The three raids within a month's time (5 and 24 August, and 5 September 1944) caused extensive damage and in some cases complete building destruction. Production in the third quarter fell 27 per cent below the second quarter and recovery was almost achieved in November. Net loss in production, August through November 1944, was approximately 780 engines. 400 engines were delivered in August, and during September only 230 engines left the factory. By October deliveries increased to 405. In November 585 engines were delivered. Exhibit G illustrates production quarterly and yearly from 1939 through the first quarter of 1945. Exhibit H indicates monthly production from January 1939 through March 1945 as well as the plants to which the finished engines were delivered and the total number each received.

b. One of the major indirect results of bombing of German industries, according to plant officials, was the deterioriation in the quality of component parts and accessories.

c. Cause of loss.

(1) Bombing attacks, although causing extensive damage, did not at any time cause great production loss. Full recovery was nearly effected by the end of November. The plant was inoperative for brief periods of time due to necessity to remove debris from, and repairing of, assembly buildings. Loss of engine test stands curtailed the shipping of finished engines.

(2) Dispersal resulted in tremendous confusion and loss of equipment. For illustration, a letter to the German air ministry, in which Bussing-NAG applied for an extra payment grant to cover depreciation loss due to

dispersal, damage to machine tools and workshop equipment, is reproduced:

* To the 25 July 1944
Reichsluftfahrtministerium
Industrial Economy Dept.

Application for Grant of Extra Payment to cover Depreciation of Machines and Workshops Equipment owing to Dispersals.

Following an order of the Jagerstab, we moved two-thirds of our mechanical workshops to 14 different places in April of this year. As many as possible were moved underground straight away. The rest were temporarily moved into workshops in small towns and villages, until they too could be moved underground.

This moving caused a lot of wear and tear to the machines and equipment.

This wear and tear was primarily caused in transportation. By working very hard, day and night, it was possible to get the machines installed in a short time; however, the labor was mostly unskilled and this led to a lot of damage being done to the machines.

This damage was done chiefly when the machines were being moved into the salt mines; the lifts, which were not intended for this sort of work, were too small for the machines, which therefore had to be lowered on to temporary platforms at the entrances to each seam by means of cranes. A lot of the machines had to be up-ended, owing to their length and the comparative smallness of the shafts and this alone would have been enough to cause considerable damage, even if the work could have been carried out in a more leisurely way. Then there was the inevitable damage caused during the dismantling of the large machines.

The damage done to the machines while they were running was still worse, as this was recurrent, whereas transport damage was only caused once. This damage can be divided into mechanical and chemical damage. The mechanical damage is caused chiefly by the machines having to stand close together in

narrow galleries, and also through machines being too near the very busy tunnel railways. In spite of all care, and because of the awful lack of space and the often unavoidable overloading of the trucks, the machines are often run into and damaged. The increase of wear through chemical action is the worst. The corrosion, as a result of the dampness in the air, is even worse than was expected. This dampness is the result partly of the necessary building operations (the setting of cement) but chiefly of the presence of so many people in a place unsuitable to the accomodation of more than a few. The walls crumble and fill the air with salt fumes, and also the air is full of salt dust and salt grains; often, too, larger pieces fell on to the machinery.

This results in extensive corrosion in and on the machinery, which it is very difficult to counteract.

(Signed)

BUSSING-NAG FLUGMOTORENWERKE G.m.b.h."

(3) Bussing was able to undertake repairs immediately after the raid of 5 August 1944 and work was progressing satisfactorily when the next raid, 24 August, occurred. This raid destroyed and damaged an extensive area. It was decided that the badly damaged buildings would be uneconomical to repair. Only the medium and lightly damaged structures were deemed salvageable. The air ministry as well as the Todt organization provided contractors for an unlimited time.

(4) Many man-hours (actual figures could not be obtained) were lost due to air raid alerts, building air raid shelters, training of wardens and drilling factory personnel in air raid discipline. Extensive use was made of camouflage netting, particularly on and around the engine test stand building; materials stocks were moved to basements and blast walls were constructed around machine tools.

(5) Loss of production because of absenteeism and inefficiency as a direct result of air raids was negligible until the attack on Brunswick on 14 January 1945. German workers, who numbered roughly one-third of total employees, stayed home in large numbers for several days (no definite number given) after each attack to protect their homes and belongings.

(6) Bombing of German transportation systems in late 1944 created bottlenecks in both receiving component parts and raw materials as well as in the shipment of the finished engine. The wider Bussing facilities were dispersed, the greater became the transportation problems. The management stated the disorganization of transportation with its resultant decrease in flow of component parts and accessories, plus quality deterioration, caused the greatest disruption in production schedules.

3. Recuperability Cycle.

a. After the August-September 1944 attacks, in spite of tremendous damage, production was almost back to normal by the end of November. Depending upon the importance of the building, repair time averaged from one to six weeks. The decision to disperse was made after the RAF raid in the first quarter of 1944, four to five months before the Eighth AF raids. Consequently, 75 per cent dispersal was accomplished by August and can be considered exceedingly successful. But, in spite of efficient dispersal, many new problems were created, such as, increasing total employees, increased supervision, added transportation strain, duplication of air raid precaution systems and the difficulty of duplicating highly specialized single-purpose machine tools and equipment, such as engine test stands. No estimates were made by plant officials as to actual production loss due to dispersal.

4. The engine test stand buildings proved to be the most vulnerable part of the plant. Loss of test stands caused considerable production loss due to increase in time incurred in transporting engines to and from the test stands, which were dispersed to separated sites within the plant area.

IV INTELLIGENCE CHECK

1. The pre-raid intelligence on this plant was quite accurate as to the identification of buildings, their use, and size. Estimate of the numbers of employees was fairly accurate; 4,500 - 5,000 plus, as against the actual number of 6,000 - 7,000.

2. Estimates of physical bomb damage were fairly accurate, but were conservative regarding production losses. As recorded in the Ministry of Home Security Report RE/H. 206, the loss was stated to be the equivalent of three months' pre-attack output, or roughly 500 engines, whereas the actual loss was approximately 780 power units.

V DATA RELEVANT TO OTHER STUDIES

1. Physical Damage-- During the 24 August 1944 attack, Hangar F

(tools, jigs, maintenance shop and woodworking department, Exhibit A) was set afire. The wooden roof collapsed and burning beams fell on the machines and generated so much heat that the metal of the machines was annealed so that they could not be salvaged.

2. Physical Damage-- In the attack of 9/10 September 1944 a land mine hit Building D, completely obliterating it. The unusual success of this land mine, according to plant officials, was due to the fact that the bomb exploded 30 feet above the floor in the center of the building, the whole force of the blast affecting the steel construction in such a way that the supporting beams acted like gigantic lever arms which threw the building open.

VI EVALUATIONS AND IMPRESSIONS

1. Dispersal to widely scattered small factories establishing departments partly underground, made the Bussing factory practically immune to future bombing. Exhibit I is a map which illustrates the wide dispersal of Bussing-NAG.

2. Damage to larger buildings does not result necessarily in great permanent loss of production.

3. The high concentration of our daylight bombing attacks on the Brunswick area, forced further dispersal within the remaining operating plant area.

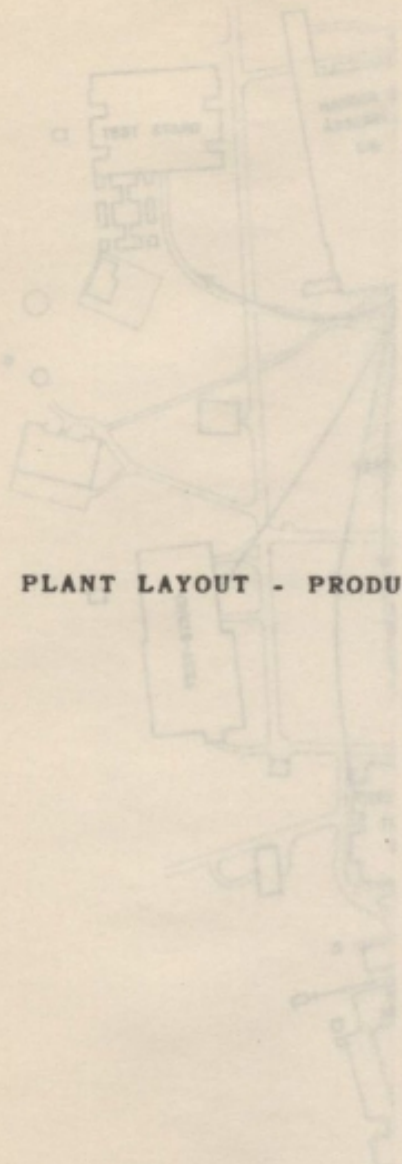
4. The bombing attacks and the loss of engine test stands caused serious delays in the deliveries of finished and tested engines, as these engines had to be transported to outlying areas where test stands had been erected, then transported back to the main plant for final re-assembly and shipping.

5. Absenteeism and labor turnover were never a great problem with this plant until 1945.

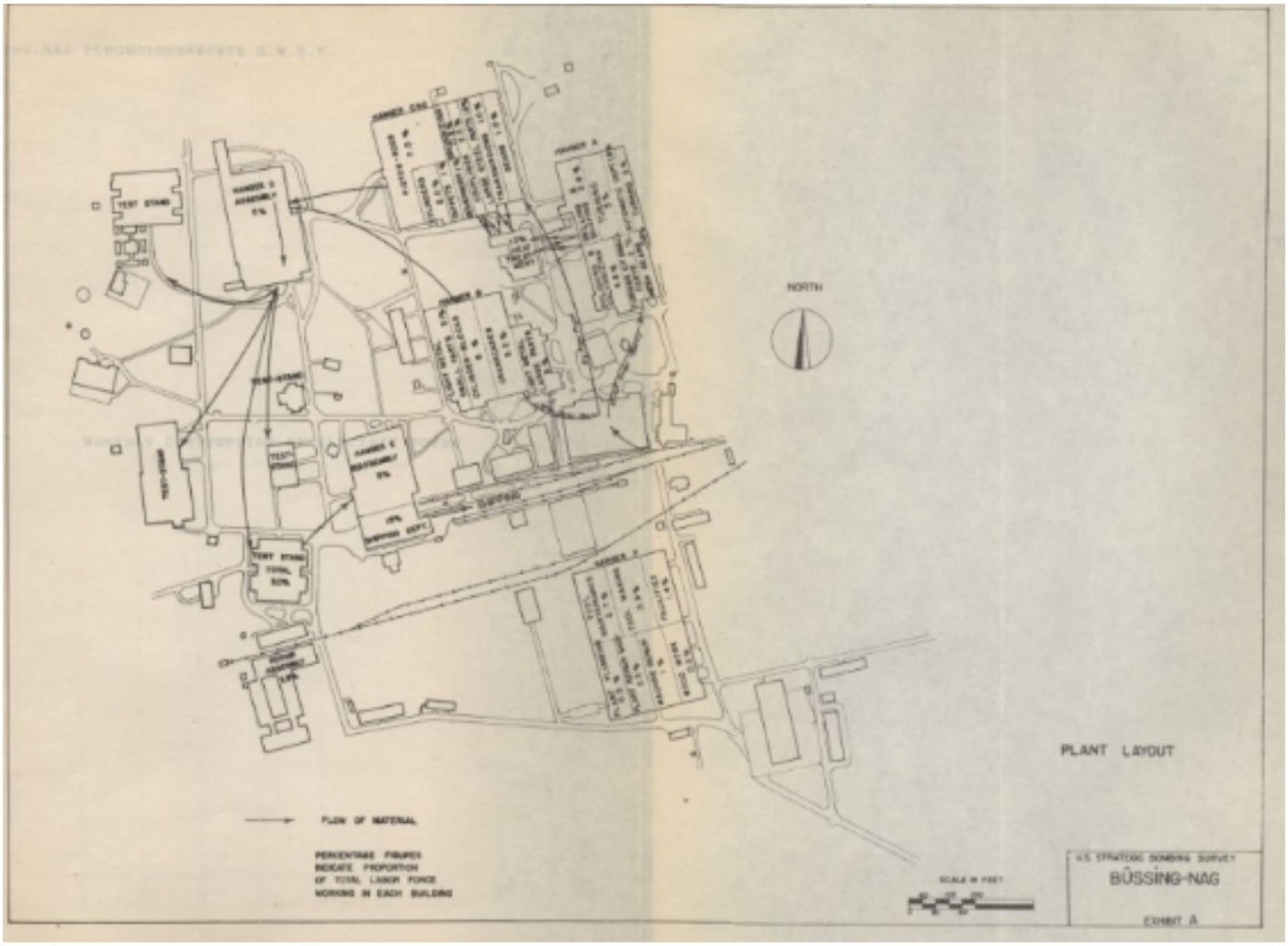
6. It was stated by the plant officials that disorganization of transportation and inability to plan on a steady flow of component parts and accessories, as well as the quality of these parts, more than the direct bombing of the plant caused the greatest disruption of production of finished engines.

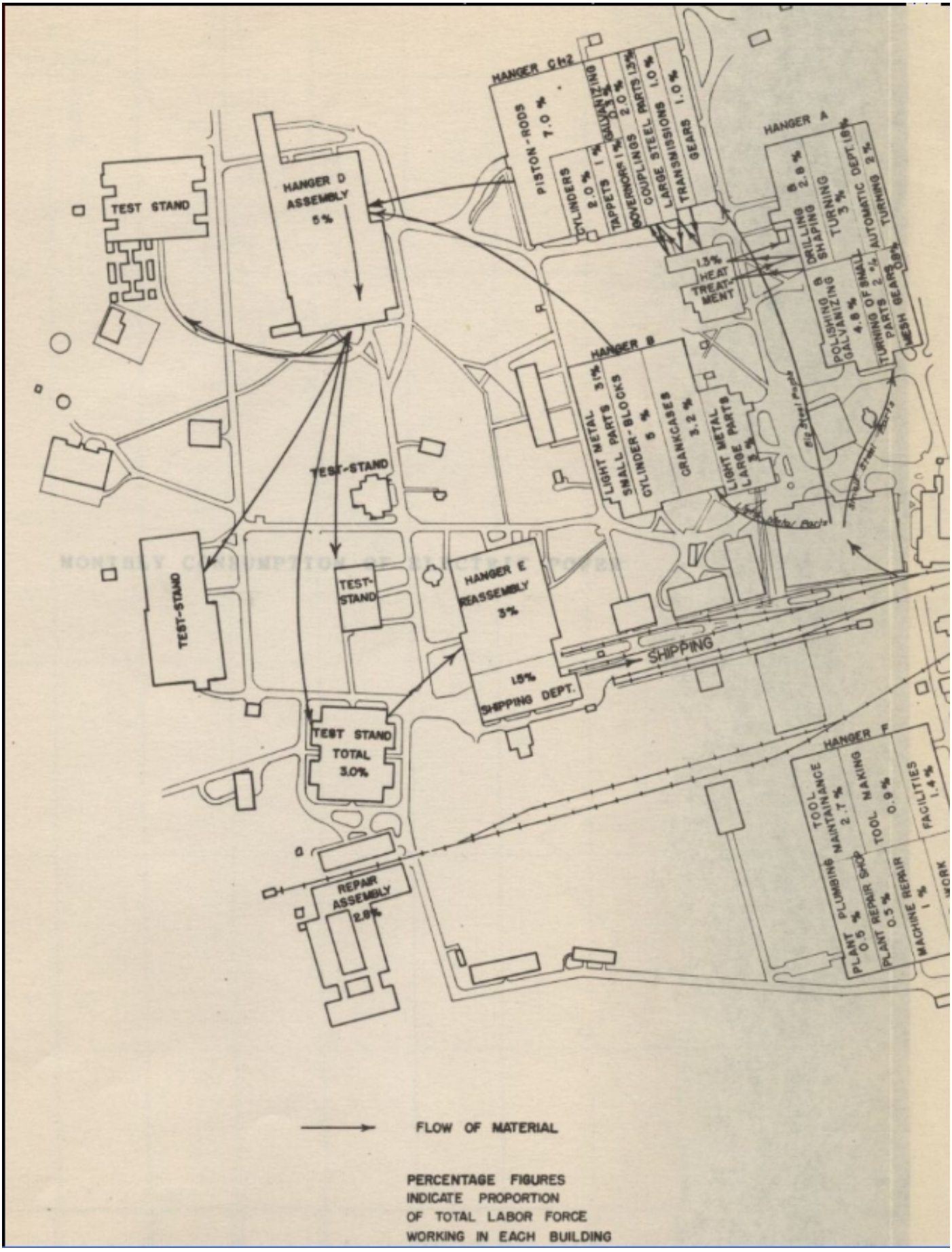
7. The Bussing-NAG plant is not a part of any definite complex and its planned production schedules were burned before the occupation of the Brunswick area by Allied forces, by order of the air ministry, and therefore are not available.

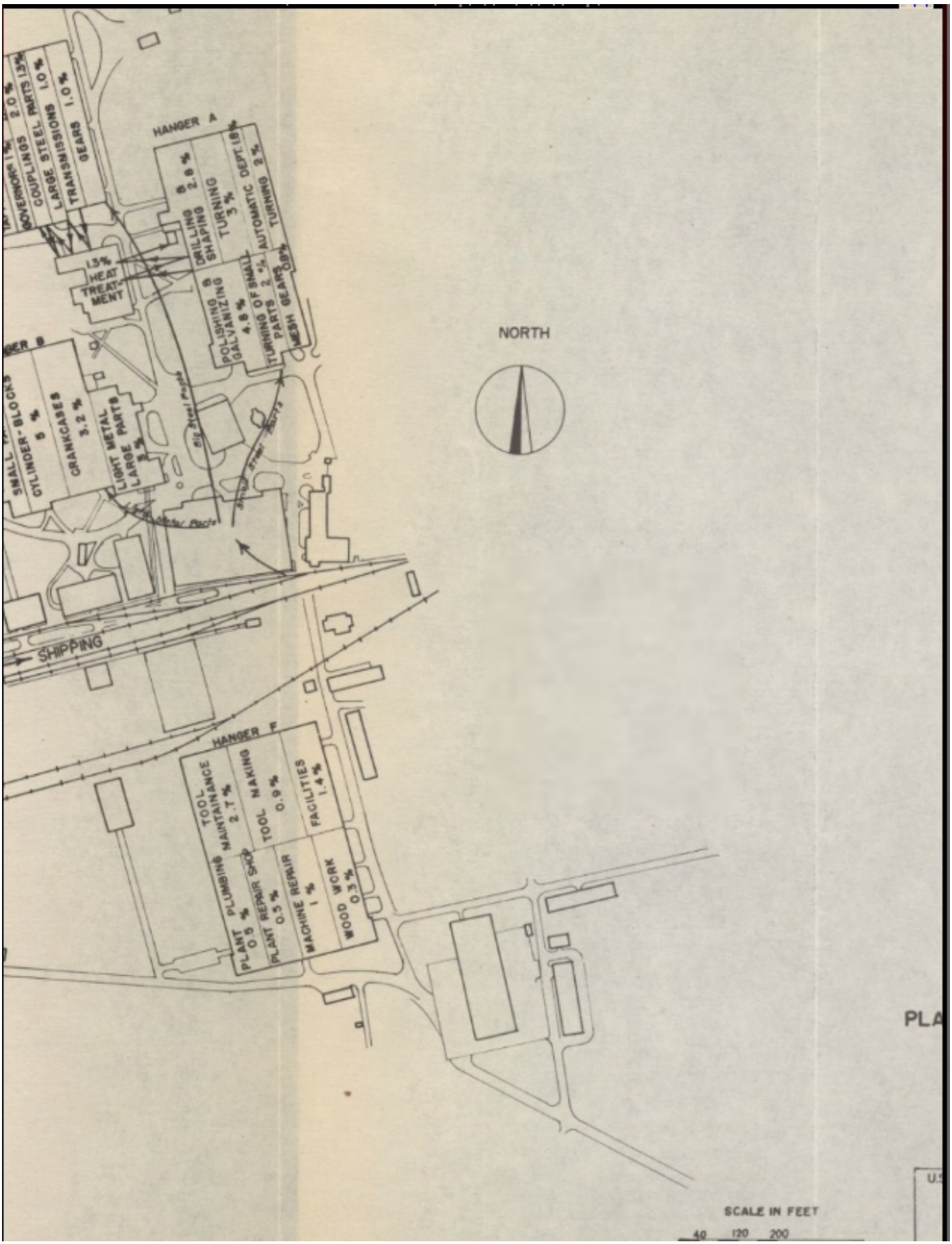
BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT A



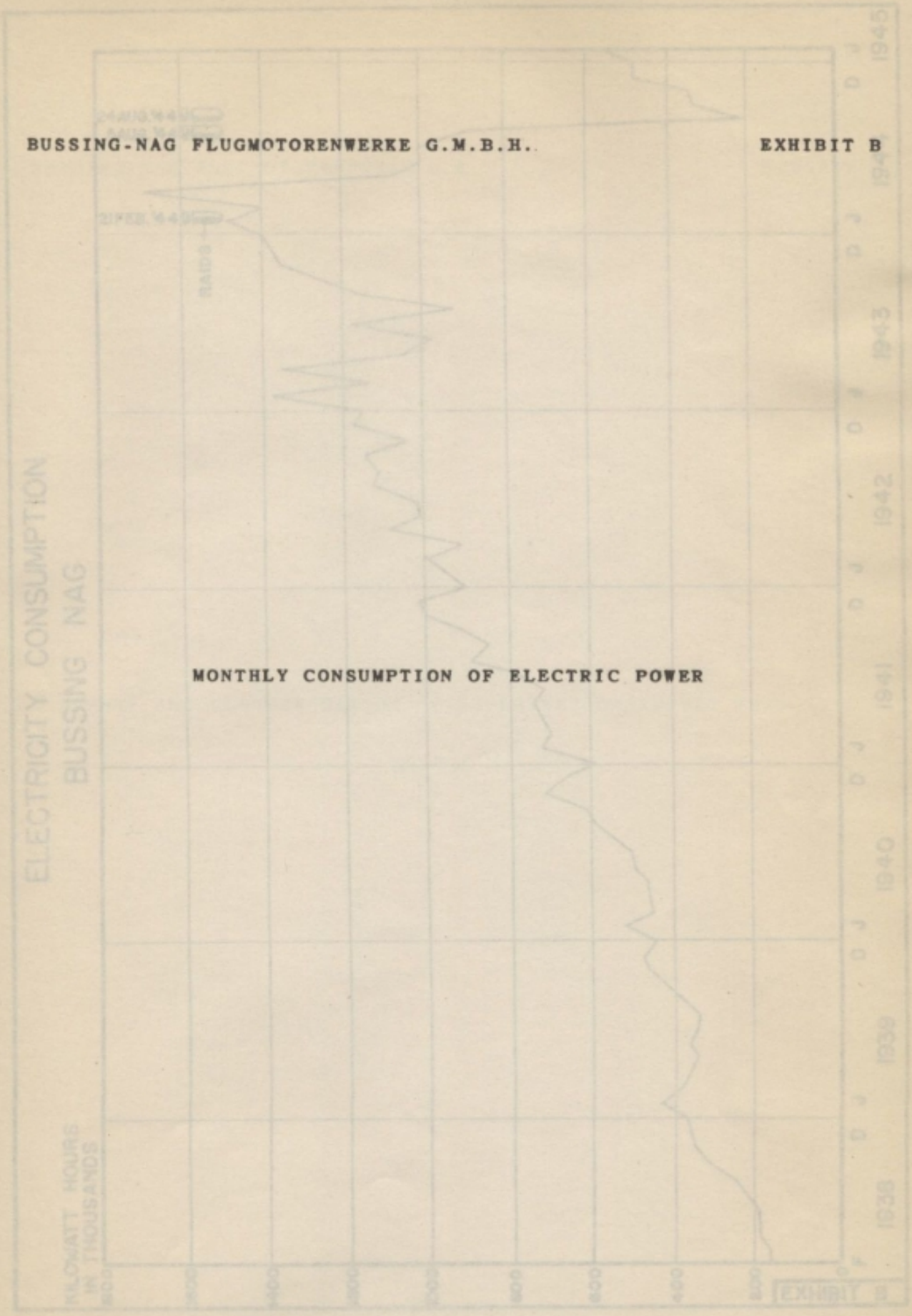
PLANT LAYOUT - PRODUCTION FLOW CHART


NORTH
PLANT LAYOUT
FLOW OF MATERIAL
PERCENTAGE FIGURES INDICATE PROPORTION OF TOTAL LABOR FORCE WORKING IN EACH BUILDING
SCALE IN FEET
U.S. STRATEGIC BOMBING SURVEY
BÜSSING-NAG
EXHIBIT A

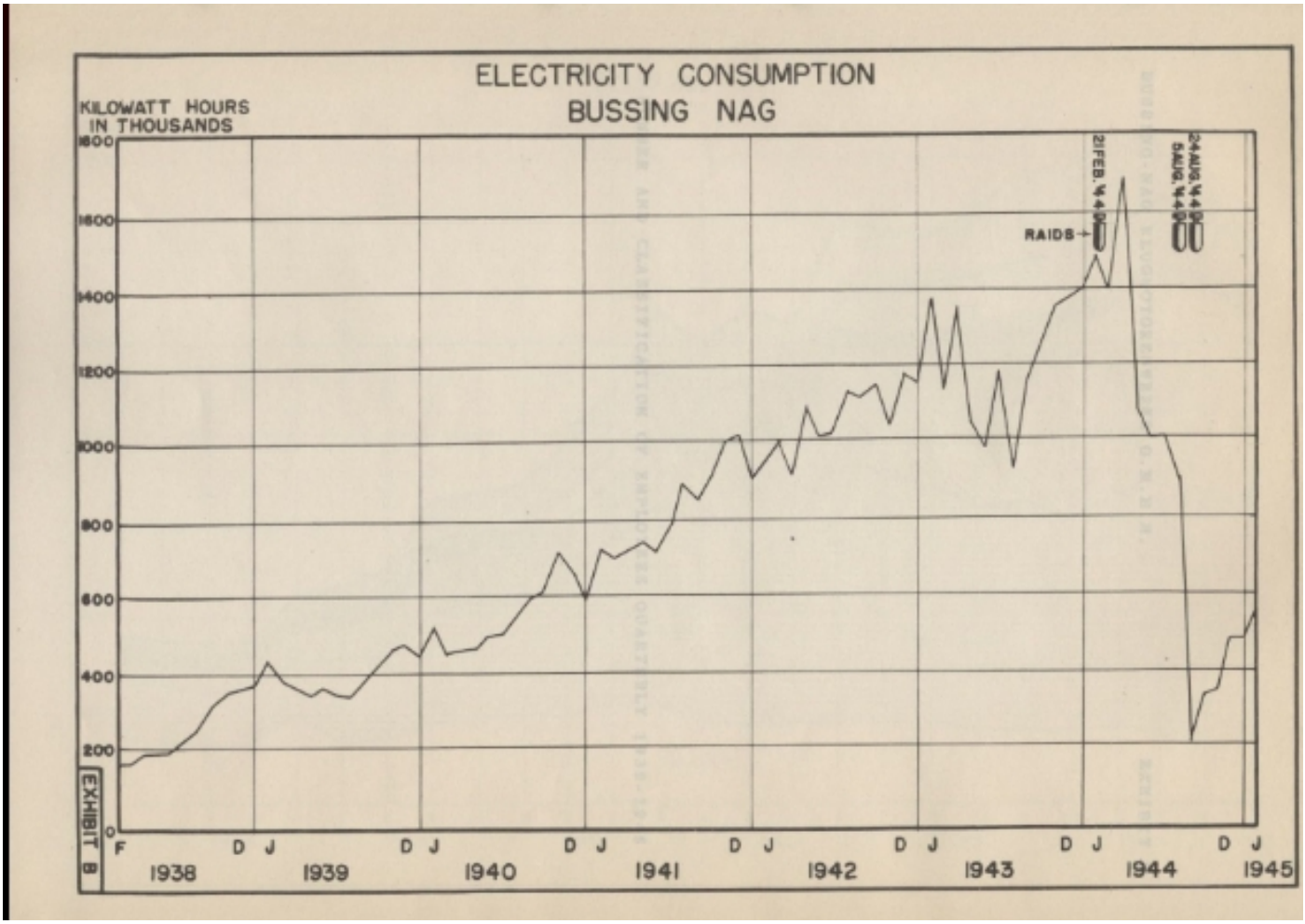

HANGER C
PISTON-RODS 7.0%
CYLINDERS 2.0%
GALVANIZING 0.3%
TAPPETS 1%
GOVERNORS 2.0%
COUPLINGS 1.3%
LARGE STEEL PARTS 1.0%
TRANSMISSIONS 1.0%
GEARS
HANGER A
DRILLING 2.8%
SHAPING
TURNING 3%
AUTOMATIC DEPT. 1.8%
TURNING 2%
TURNING OF SMALL PARTS 2.2%
MESH GEARS 0.8%
POLISHING & GALVANIZING 4.8%
1.3% HEAT TREATMENT
HANGER D ASSEMBLY 5%
TEST STAND
HANGER B
LIGHT METAL 31%
SMALL PARTS
CYLINDER-BLOCKS 5%
CRANKCASES 3.2%
LIGHT METAL LARGE PARTS 3%
TEST-STAND
TEST-STAND
TEST-STAND
HANGER E REASSEMBLY 3%
1.5% SHIPPING DEPT.
SHIPPING
TEST STAND TOTAL 3.0%
HANGER F
TOOL MAINTAINANCE 2.7%
TOOL MAKING 0.9%
FACILITIES 1.4%
PLANT PLUMBING 0.5%
PLANT REPAIR SHOP 0.5%
MACHINE REPAIR 1%
REPAIR ASSEMBLY 2.8%
FLOW OF MATERIAL
PERCENTAGE FIGURES INDICATE PROPORTION OF TOTAL LABOR FORCE WORKING IN EACH BUILDING


HANGER A
GOVERNORS 1%
COUPLINGS 2.0%
LARGE STEEL PARTS 1.3%
TRANSMISSIONS 1.0%
GEARS 1.0%
1.3% HEAT TREAT-MENT
DRILLING & SHAPING 2.8%
TURNING 3%
AUTOMATIC DEPT. 1.8%
TURNING 2%
POLISHING & GALVANIZING 4.8%
TURNING OF SMALL PARTS 2.4%
MESH GEARS 0.8%
NORTH
SMALL
CYLINDER-BLOCKS 5%
CRANKCASES 3.2%
LIGHT METAL LARGE PARTS 3%
SHIPPING
HANGER B
TOOL MAINTAINANCE 2.7%
TOOL MAKING 0.9%
FACILITIES 1.4%
PLANT PLUMBING 0.5%
PLANT REPAIR SHOP 0.3%
MACHINE REPAIR 1%
WOOD WORK 0.3%
SCALE IN FEET
40 120 200

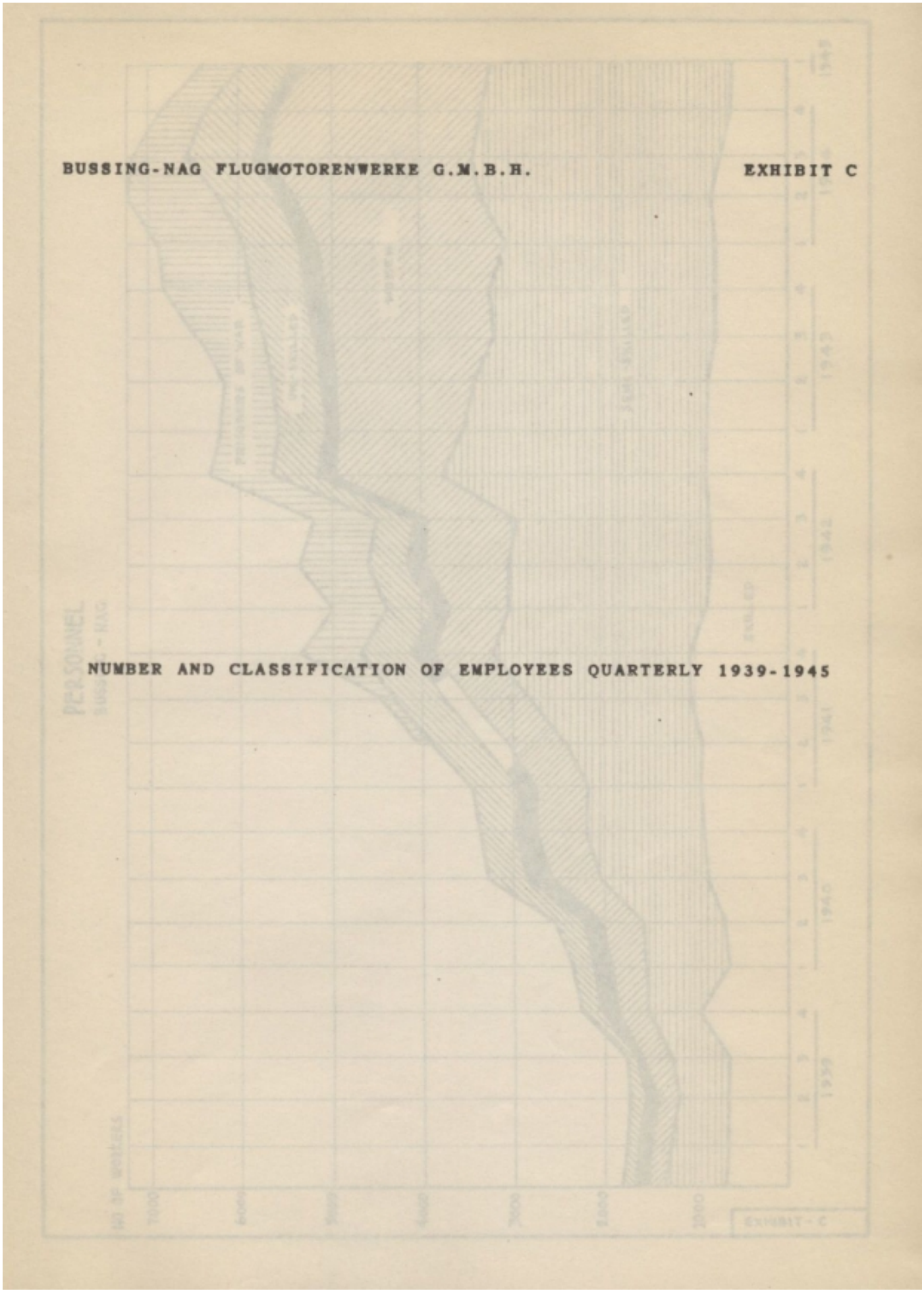
BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT B



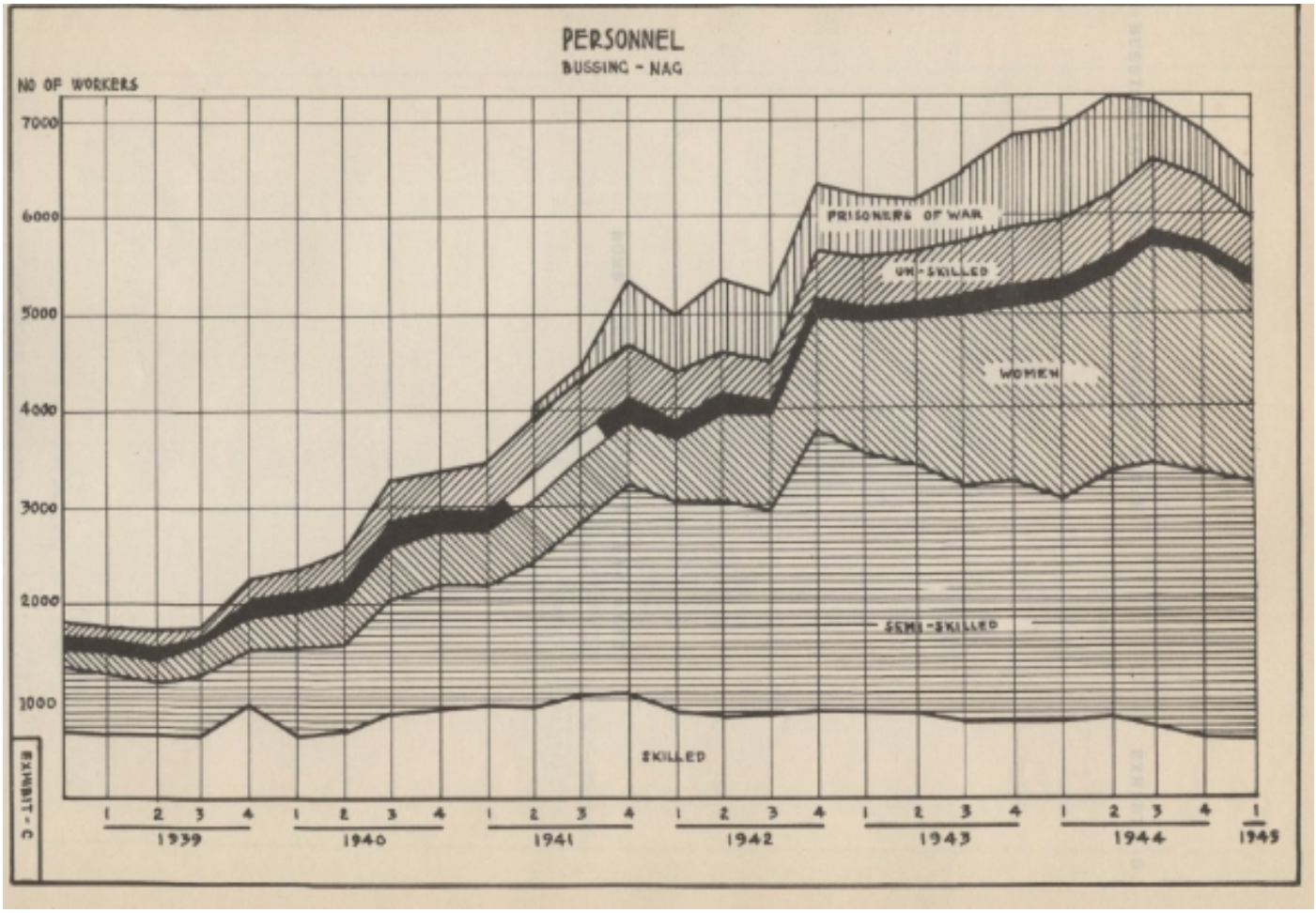
MONTHLY CONSUMPTION OF ELECTRIC POWER


ELECTRICITY CONSUMPTION
BUSSING NAG
KILOWATT HOURS
IN THOUSANDS
1800
1600
1400
1200
1000
800
600
400
200
0
RAIDS
EXHIBIT B
F
D J
1938
1939
1940
1941
1942
1943
1944
1945

BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT C

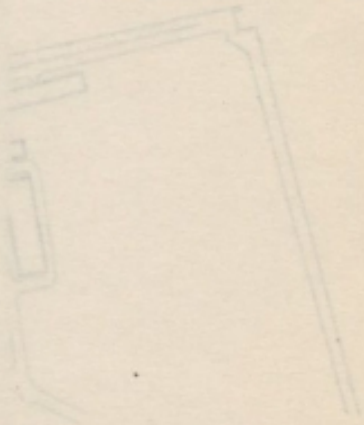


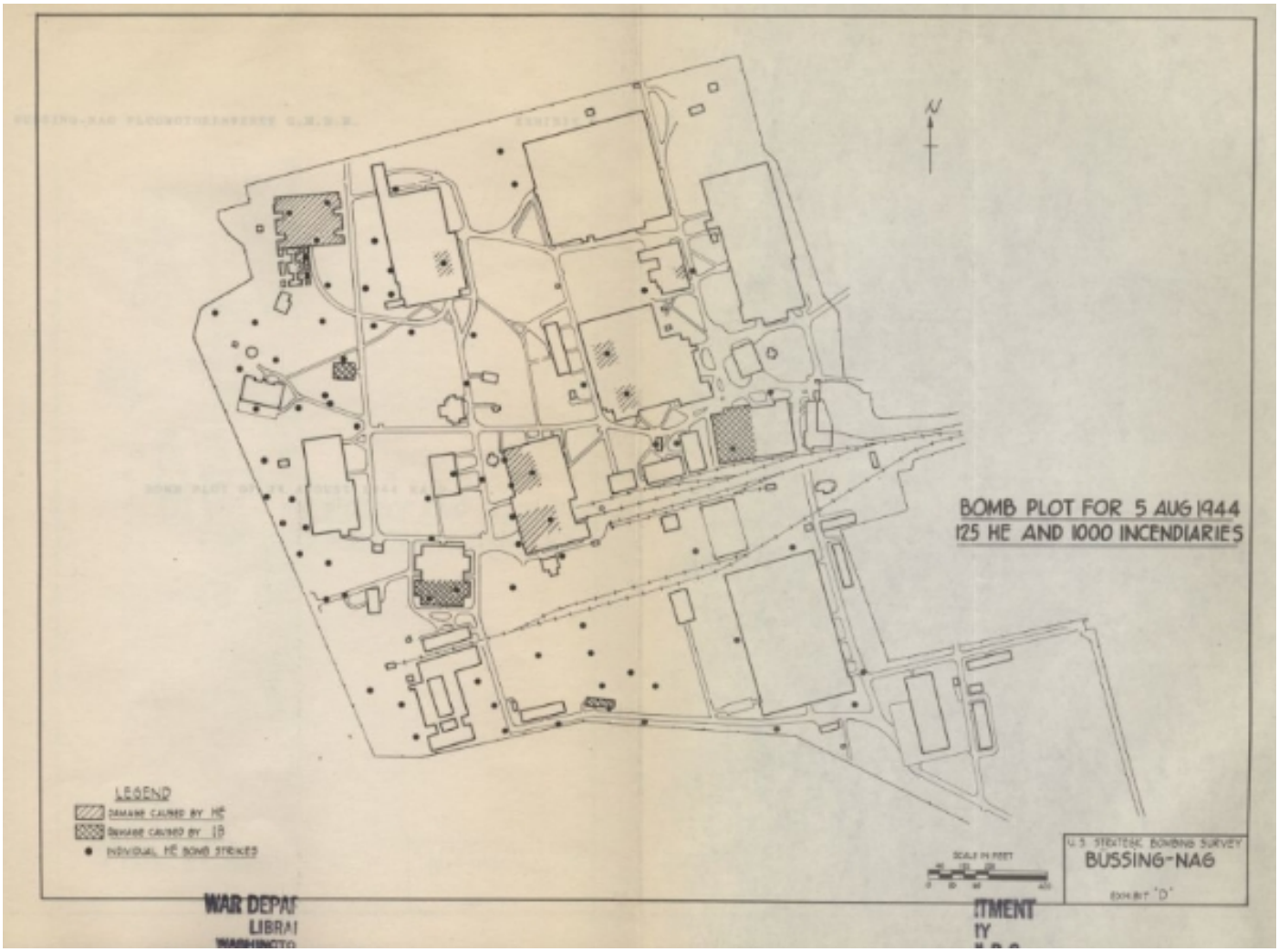
NUMBER AND CLASSIFICATION OF EMPLOYEES QUARTERLY 1939-1945

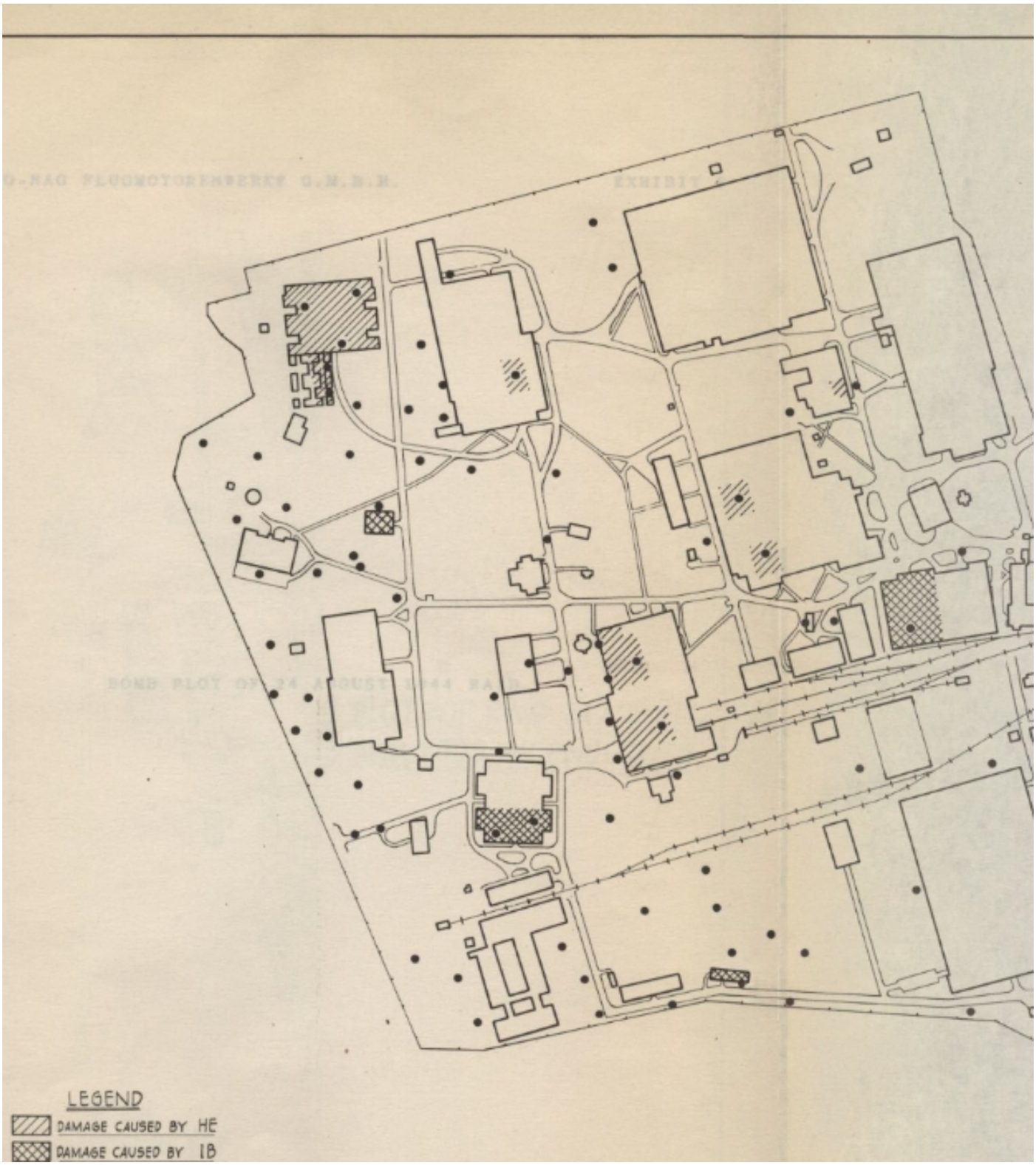

PERSONNEL
BUSSING - NAG
NO OF WORKERS
7000
6000
5000
4000
3000
2000
1000
PRISONERS OF WAR
UN-SKILLED
WOMEN
SEMI-SKILLED
SKILLED
1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1
1939
1940
1941
1942
1943
1944
1945
EXHIBIT - C

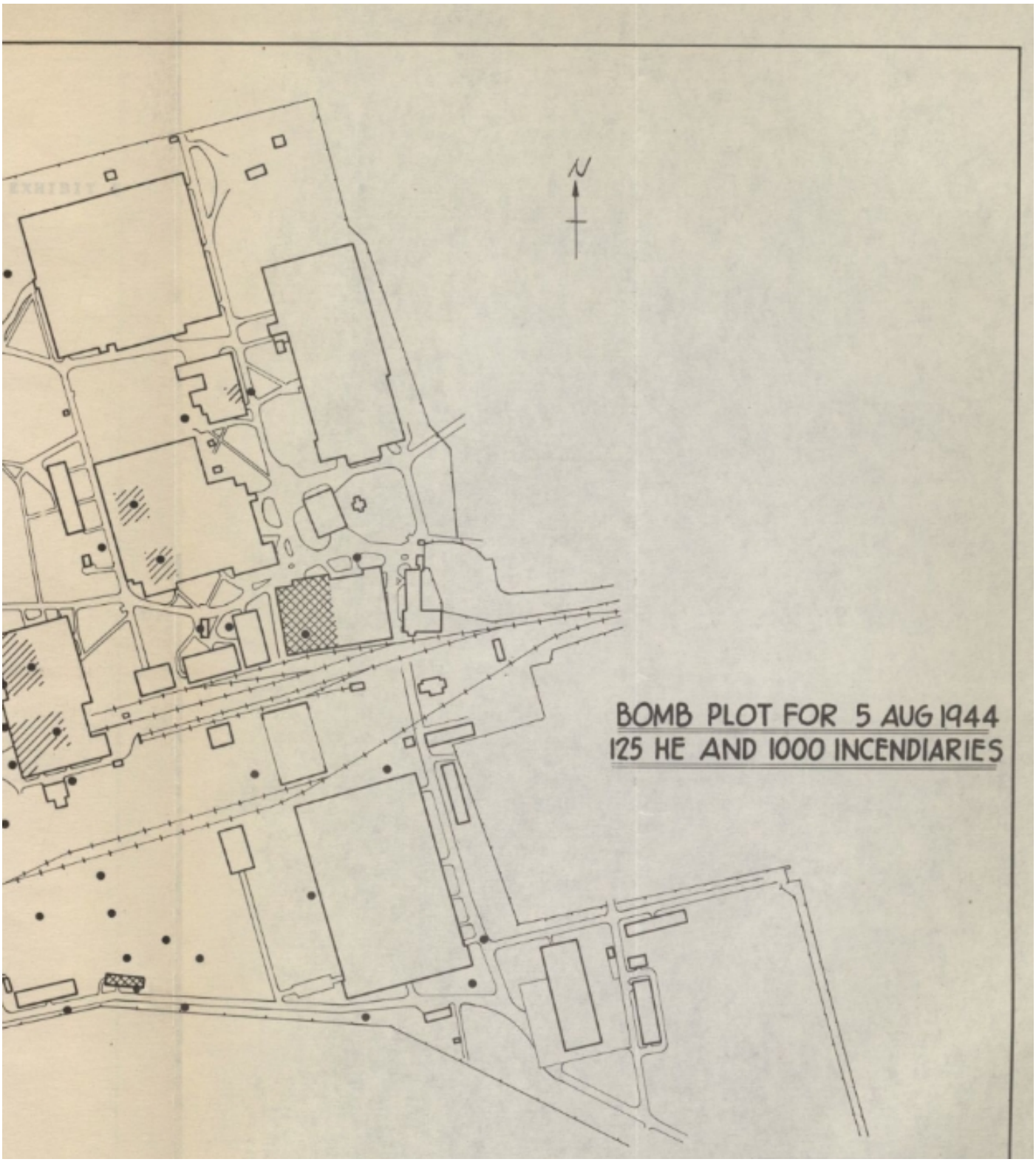
BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT D

BOMB PLOT OF 5 AUGUST 1944 RAID

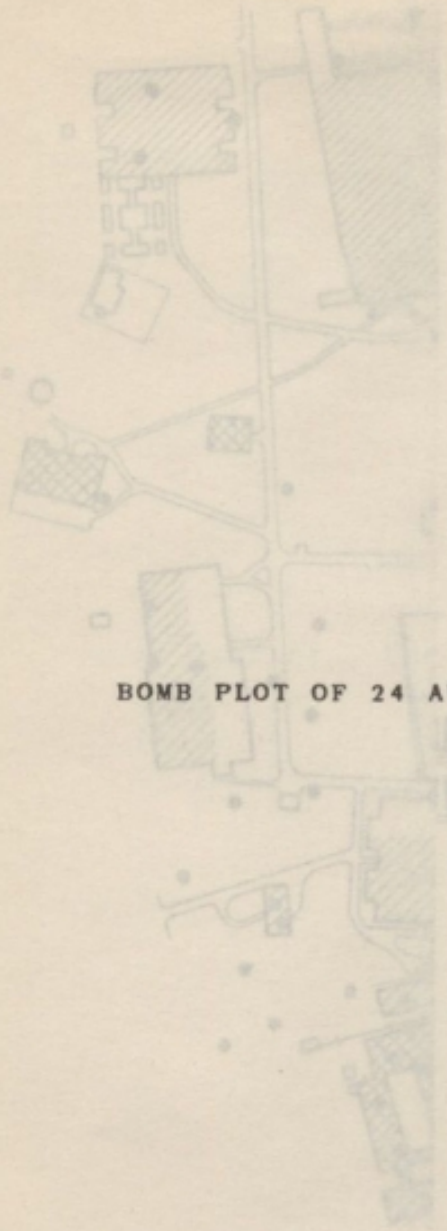




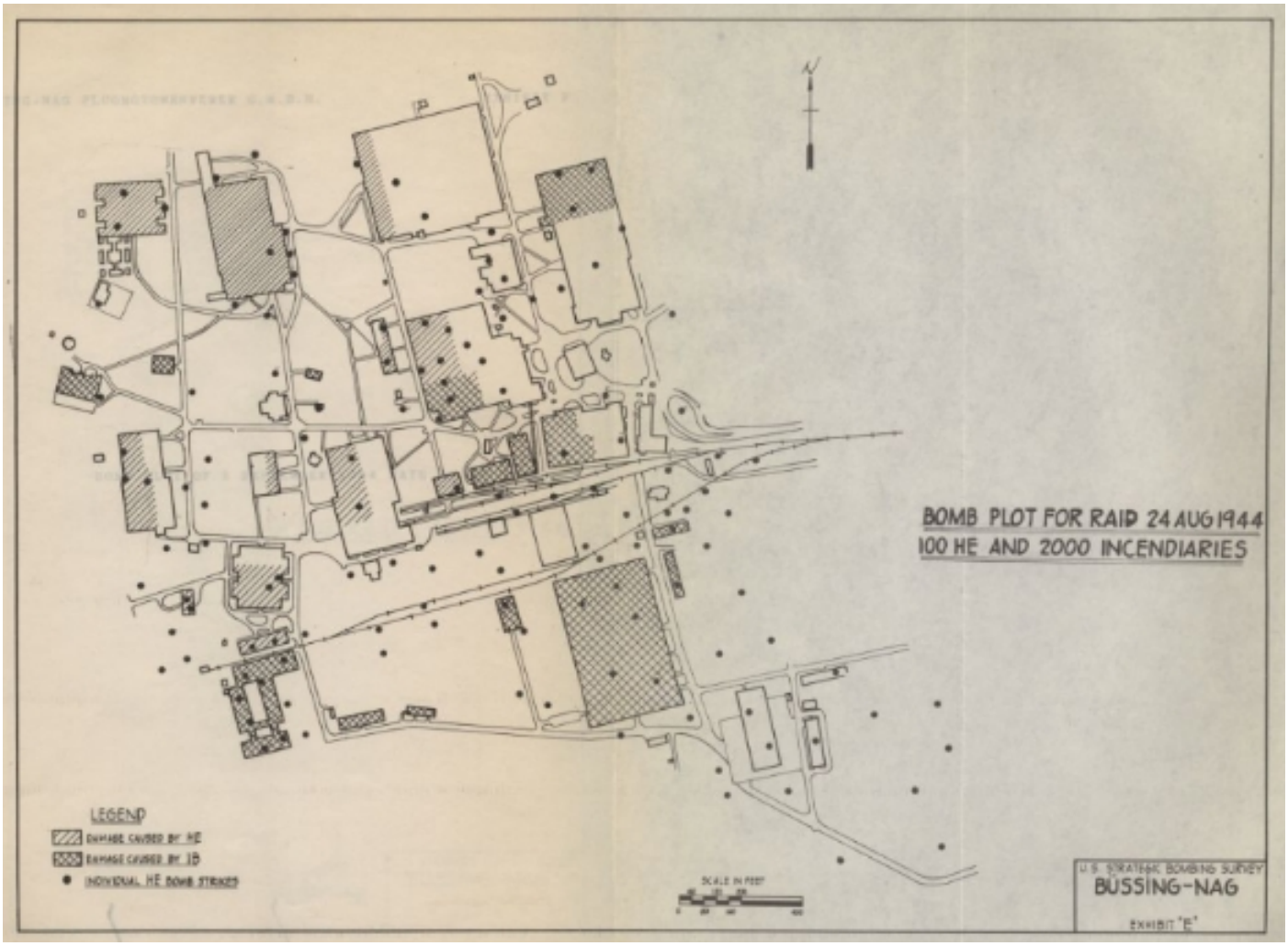

LEGEND
DAMAGE CAUSED BY HE
DAMAGE CAUSED BY IB

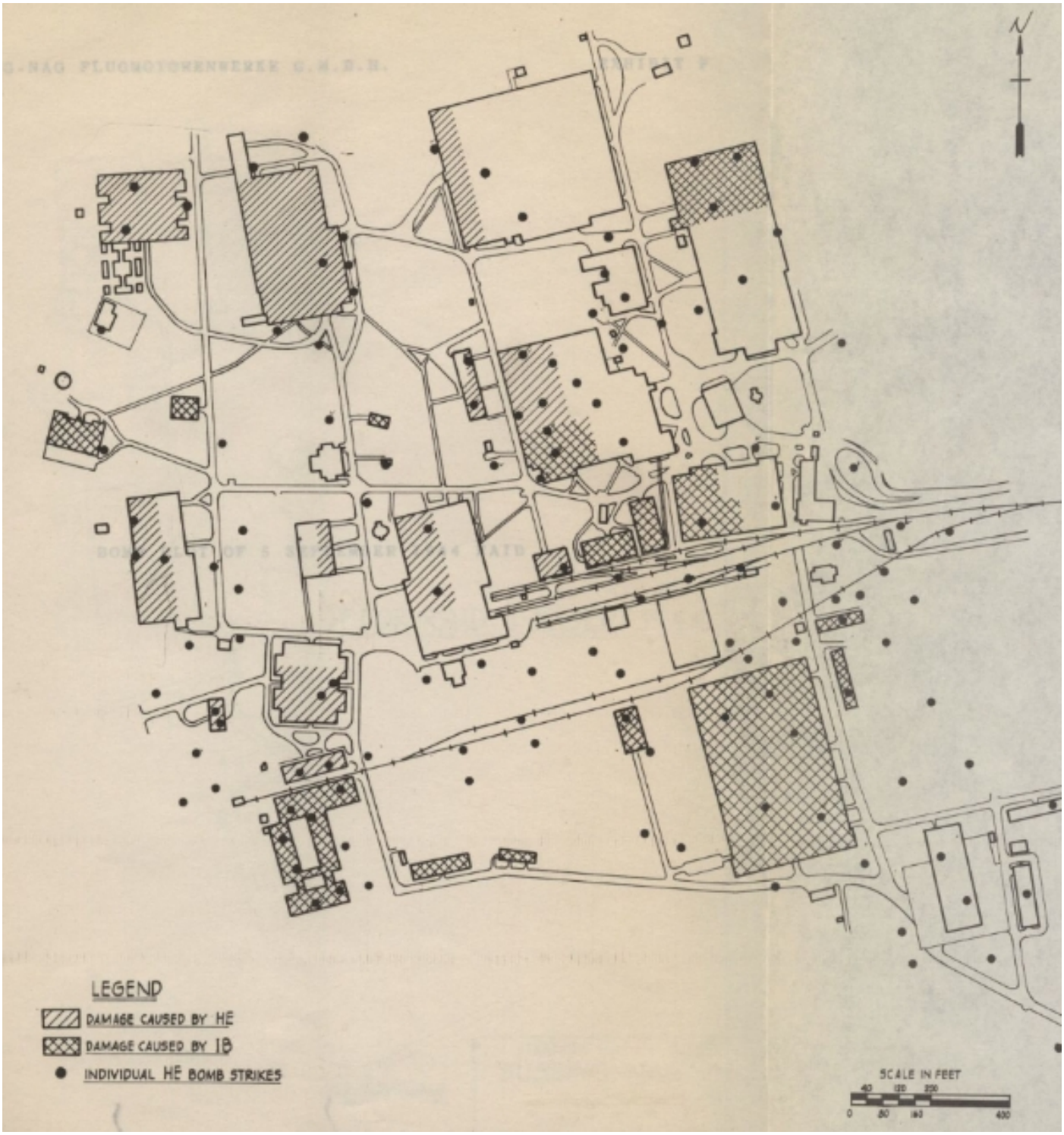

N
BOMB PLOT FOR 5 AUG 1944
125 HE AND 1000 INCENDIARIES

BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT E

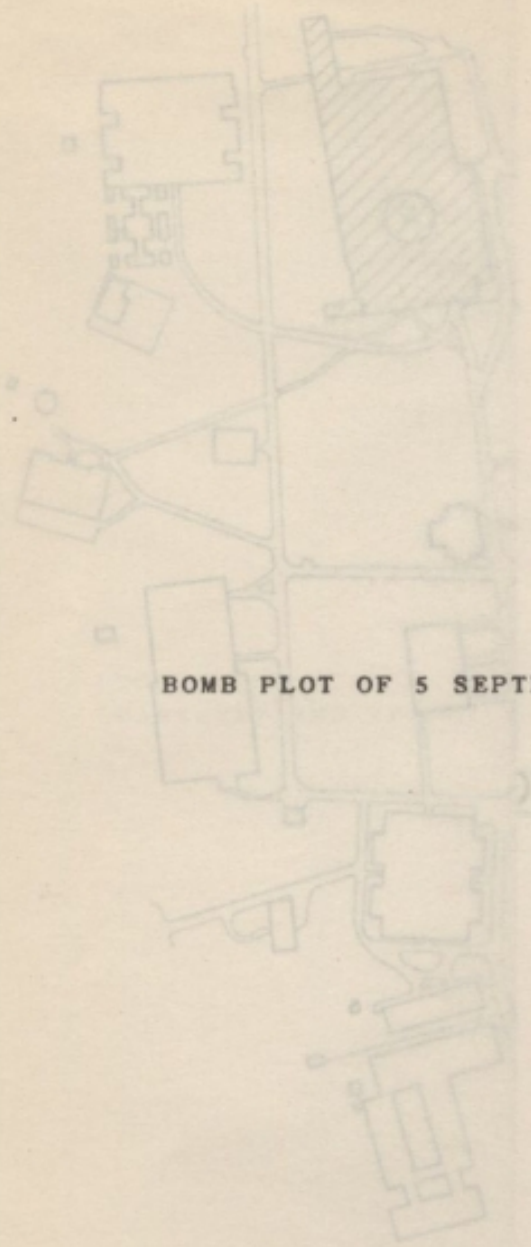


BOMB PLOT OF 24 AUGUST 1944 RAID

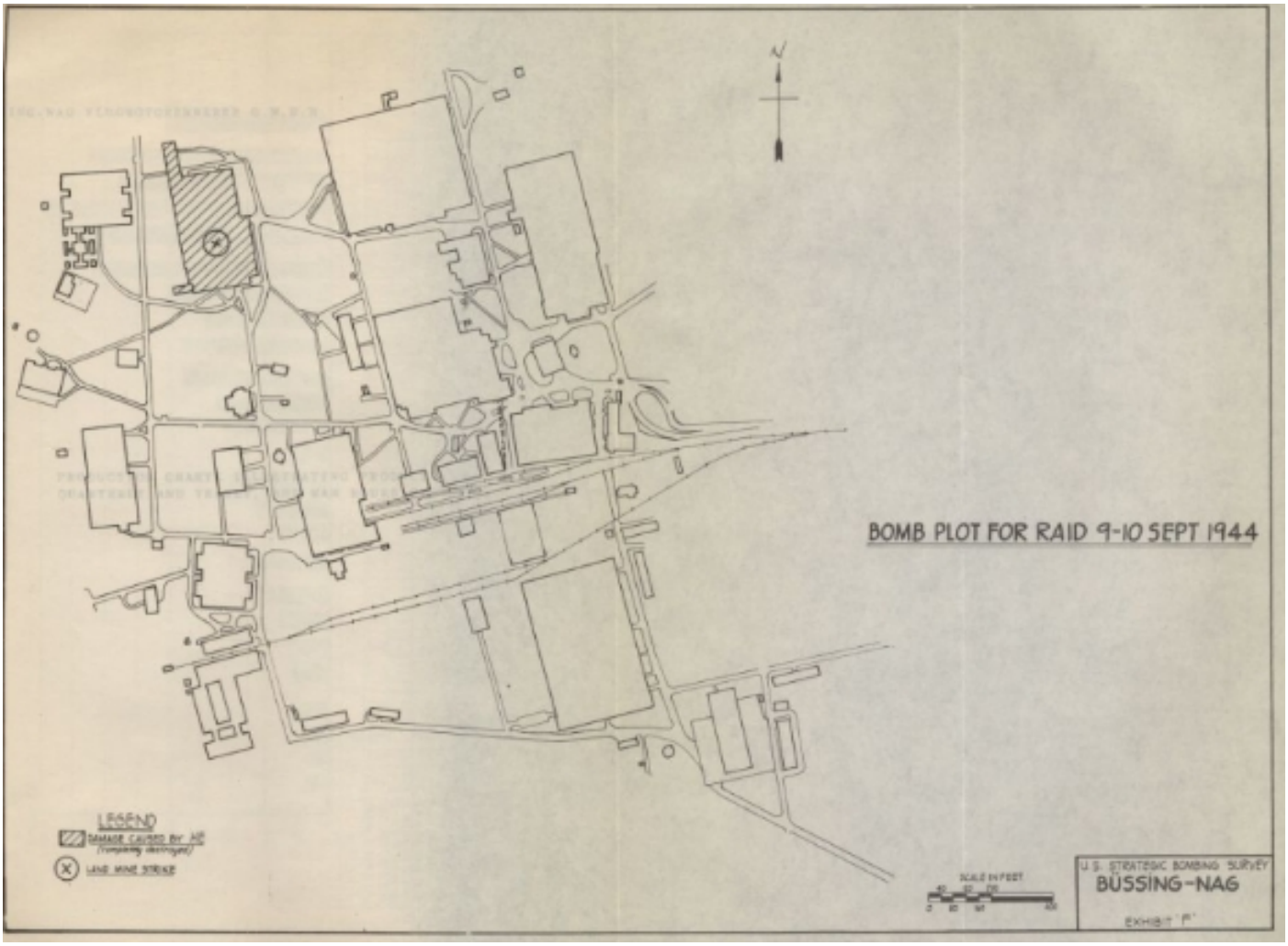

BOMB PLOT FOR RAID 24 AUG 1944
100 HE AND 2000 INCENDIARIES
LEGEND
DAMAGE CAUSED BY HE
DAMAGE CAUSED BY IB
INDIVIDUAL HE BOMB STRIKES
SCALE IN FEET
U.S. STRATEGIC BOMBING SURVEY
BUSSING-NAG
EXHIBIT "E"


N
LEGEND
DAMAGE CAUSED BY HE
DAMAGE CAUSED BY IB
INDIVIDUAL HE BOMB STRIKES
SCALE IN FEET
0
80
400

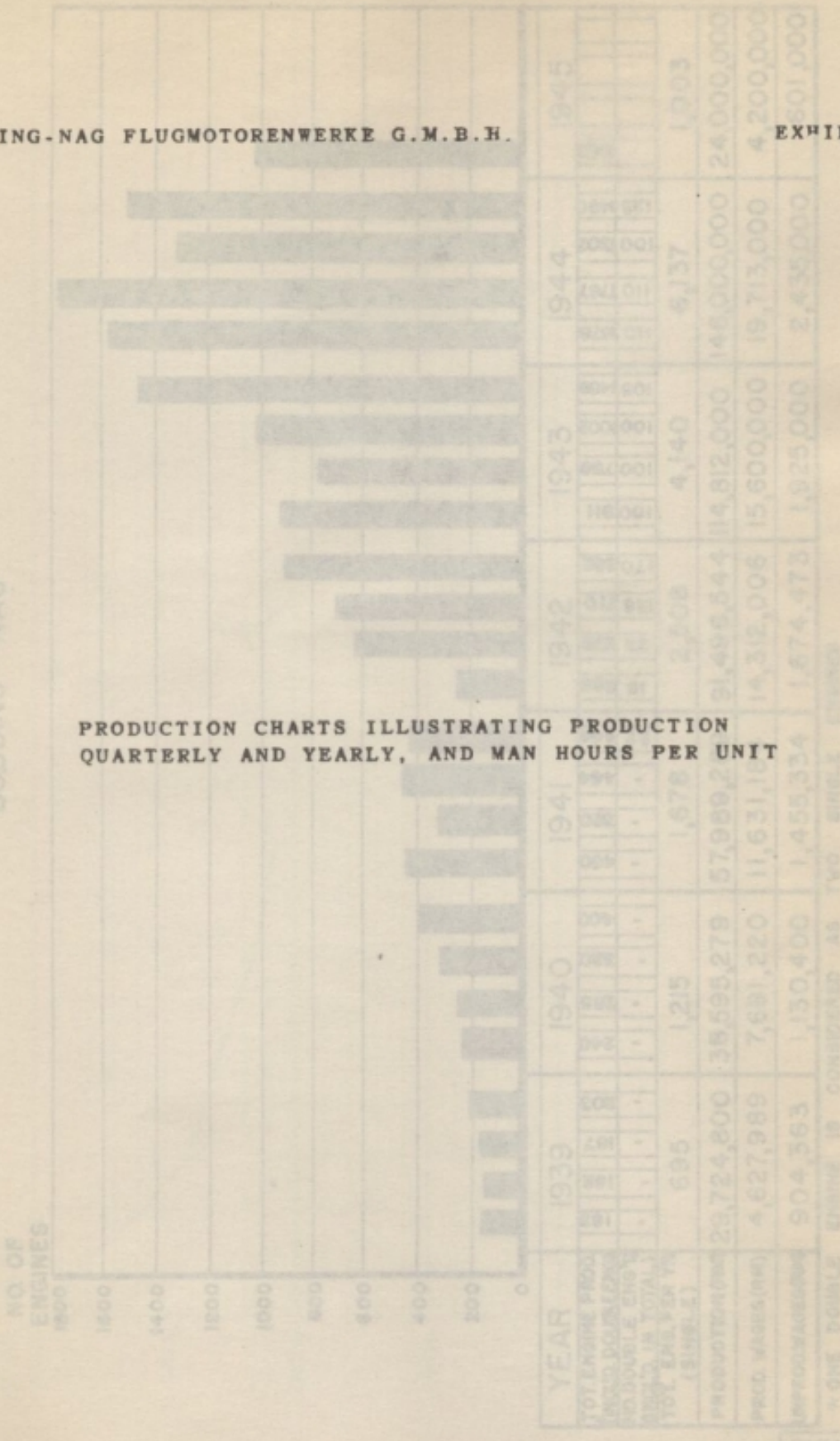
BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT F



BOMB PLOT OF 5 SEPTEMBER 1944 RAID


N
BOMB PLOT FOR RAID 9-10 SEPT 1944
LEGEND
DAMAGE CAUSED BY AIR
(Completely destroyed)
LAND MINE STRIKE
SCALE IN FEET
U.S. STRATEGIC BOMBING SURVEY
BÜSSING-NAG
EXHIBIT 'F'

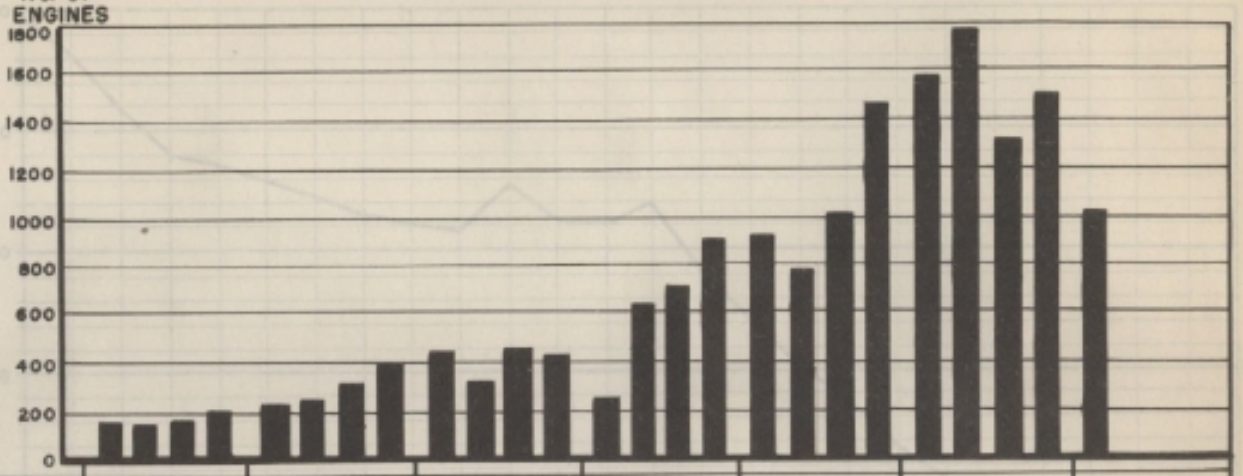
BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT G



PRODUCTION CHARTS ILLUSTRATING PRODUCTION
QUARTERLY AND YEARLY, AND MAN HOURS PER UNIT

ENGINE PRODUCTION

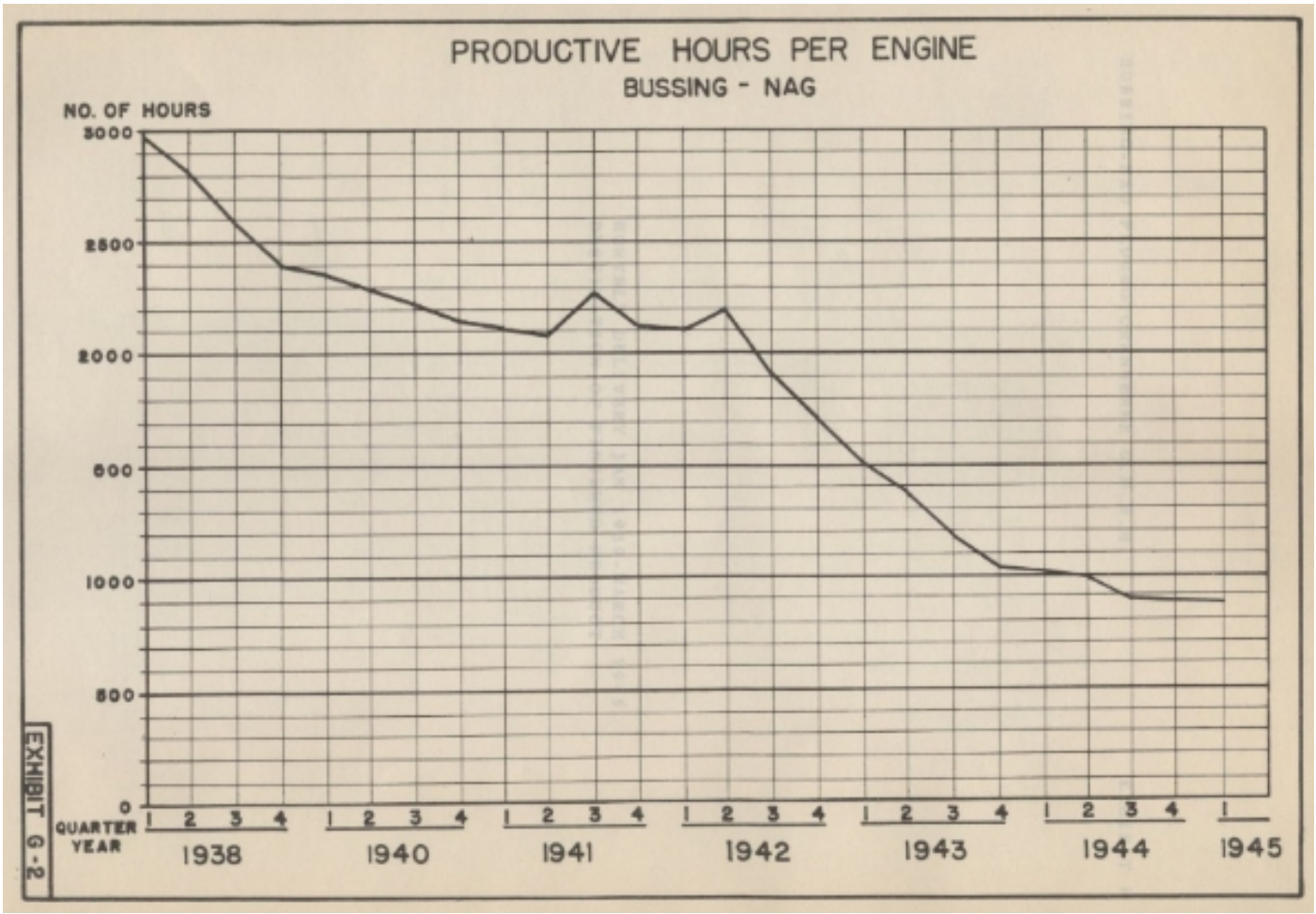
BÜSSING - NAG



YEAR	1939	1940	1941	1942	1943	1944	1945
TOT. ENGINE PROD. (INCL'D DOUBLE ENG)	163 182 167 203	240 256 320 400	450 330 464 444	248 538 710 992	1091 1078 1002 1459	1676 1767 1300 1490	1008
NO. DOUBLE ENG'S (INCL'D. IN TOTAL)	- - - -	- - - -	- - - 22	19 23 136 170	100 100 100 106	110 110 100 125	
TOT. ENG. PER YR (SINGLE)	695	1,215	1,678	2,508	4,140	6,137	1,003
PRODUCTION (RM)	29,724,800	38,595,279	57,989,289	91,496,544	114,812,000	146,000,000	24,000,000
PROD. WAGES (RM)	4,627,989	7,691,220	11,631,184	14,312,006	15,600,000	19,713,000	4,200,000
UNPROD. WAGES (RM)	904,363	1,130,400	1,455,334	1,674,473	1,925,000	2,435,000	601,000

* ONE DOUBLE ENGINE IS CONSIDERED AS TWO SINGLE ENGINES

EXHIBIT G-1


PRODUCTIVE HOURS PER ENGINE
BUSSING - NAG
NO. OF HOURS
3000
2500
2000
500
1000
500
0
QUARTER
YEAR
1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1
1938
1940
1941
1942
1943
1944
1945
EXHIBIT G-2

BUSSING-NAG FLUGMOTORENWERKE G.M.B.H. EXHIBIT H

MONTHLY DELIVERY JAN 1939-MARCH 1945
DESTINATION OF FINISHED PRODUCT

MONTHLY DELIVERY JANUARY 1939 - MARCH 1945
and DESTINATION of DELIVERED PRODUCT

EXHIBIT H

DELIVERY OF ENGINES 1939

	Single Engine DB-601	Double Engine
JANUARY	35	-
FEBRUARY	65	-
MARCH	63	-
APRIL	52	-
MAY	55	-
JUNE	55	-
JULY	60	-
AUGUST	40	-
SEPTEMBER	67	-
OCTOBER	73	-
NOVEMBER	70	-
DECEMBER	60	-
	695	-

Delivered To:	Single Engine
Dornier-Werke, Wismar	112
Arado, Warnemunde	253
Wierner-Neustadter Flugzeug-werke, Wiener-Neustadt	40
Erla-Werke, Leipzig	40
MIAG, Braunschweig	92
Gothaer Waggonfabrik, Gotha	20
Verschiedene Luftzeugamter	138
	695

DELIVERY OF ENGINES 1940

	Single Engine DB-601	Double Engine
JANUARY	69	-
FEBRUARY	91	-
MARCH	80	-
APRIL	85	-
MAY	85	-
JUNE	85	-
JULY	105	-
AUGUST	107	-
SEPTEMBER	108	-
OCTOBER	125	-
NOVEMBER	135	-
DECEMBER	140	-
	1215	

Delivered To:	Single Engine
Arado, Warnemunde	125
Wierner-Neustadter Flugzeug-werke, Wierner-Neustadt	56
Messerschmitt, Regensburg	82
Erla-Werke, Leipzig	65
Fieseler Flugzeugwerke, Kassel	48
Messerschmitt, Augsburg	258
MIAG, Braunschweig	253
Focke-Wulf, Bremen	91
Gothaer Waggon-Fabrik, Gotha	94
AGO, Oschersleben	32
Verschiedene Luftzeugamter	111
	1215

DELIVERY OF ENGINES 1941

	Single Engine DB-601	Double Engine DB-605
JANUARY	126	
FEBRUARY	164	
MARCH	160	
APRIL	120	
MAY	45	
JUNE	155	
JULY	170	
AUGUST	150	
SEPTEMBER	140	4
OCTOBER	139	6
NOVEMBER	146	7
DECEMBER	129	15
	1616	34

Delivered To:	Single Engine DB-601	Double Engine DB-605
Messerschmitt, Regensburg	68	
Messerschmitt, Augsburg	143	
Luther-Werke, Braunschweig	196	
Focke-Wulf, Bremen	25	
Gothaer Waggonfabrik, Gotha	106	
Wiener-Neustadter Flugzeug-werke, Wiernar-Neustadt	323	
Arado, Brandenburg	85	6
AGO, Oschersleben	44	
Verschiedene Luftzeugamter	546	
Erla, Leipzig	61	28
	1646	34

DELIVERY OF ENGINES 1942

	Single Engine DB-601	Single Engine DB-605	Double Engine DB-606	Double Engine DB-610
JANUARY	63		5	
FEBRUARY	123		3	
MARCH	42		11	
APRIL	6	114	3	
MAY		286	4	
JUNE		172	30	
JULY		165	27	7
AUGUST		140	5	30
SEPTEMBER		154	4	42
OCTOBER		150	2	40
NOVEMBER		208	2	70
DECEMBER		172		52
	234	1591	96	241

Delivered To:				
Messerschmitt, Regensburg		37		
Wiener-Neustadter Flugzeugwerke	189	577		
Erla, Leipzig	1	291		
Gothaer Waggonfabrik Gotha		48		
Luther-Werke, Braunschweig		120		
Arado, Brandenburg			69	170
Daimler-Benz, Stuttgart-Untert			2	
Junkers, Dessau			2	
Heinkel, Oranienburg				58
Verschiedene Luftzeugamter	44	516	23	13
	234	1591	96	241

DELIVERY OF ENGINES 1943

	Single Engine DB-605	Double Engine DB-610
JANUARY	210	35
FEBRUARY	255	8
MARCH	360	-
APRIL	230	12
MAY	159	32
JUNE	220	40
JULY	215	40
AUGUST	260	55
SEPTEMBER	233	52
OCTOBER	275	55
NOVEMBER	482	36
DECEMBER	400	80
	3290	425

Delivered To:	
Wiener-Neustadter Flugzeugwerke	541
Erla, Leipzig	490
Messerschmitt, Regensburg	1032
Gothaer Waggonfabrik Gotha	72
Luther-Werke, Braunschweig	362
Daimler-Benz Sindelfingen	123
Arado, Brandenburg	
Heinkel, Oranienburg	
Heinkel, Rostock	
Verschiedene Luftzeugamter	670
	3490

		71
		191
		129
	670	34
	3490	425

DELIVERY OF ENGINES 1944

	Single Engine DB-605	Double Engine DB-610
JANUARY	390	55
FEBRUARY	420	42
MARCH	470	52
APRIL	535	60
MAY	346	57
JUNE	486	83
JULY	480	96
AUGUST	400	
SEPTEMBER	230	
OCTOBER	435	
NOVEMBER	585	
DECEMBER	500	
	5827	445

Delivered To:		
Wiener-Neustadter Flugzeugwerke	726	
Erla, Leipzig	1492	
Messerschmitt, Regensburg	1347	
Gothaer Waggonfabrik Gotha	612	
Luther-Werke, Braunschweig	4	
Daimler-Benz Sindelfingen	413	
Daimler-Benz Genshagen	180	
Arado Brandenburg		200
Heinkel Oranienburg		188
Schulz & Co. Prag		56
Verschiedene Luftzeugamter	473	1
	5247	445

DELIVERY OF ENGINES 1945

	Single Engine DB-605
JANUARY	345
FEBRUARY	352
MARCH	306
	1203

Delivered To:	
Wiener-Neustadter Flugzeugwerke	98
Erla, Leipzig	220
Messerschmitt Regensburg	290
Daimler-Benz Stuttg.-Untertürkh.	1
Verschiedene Luftzeugamter	444
	1053

MONTHLY DELIVERY JANUARY 1939 - MARCH
and DESTINATION of DELIVERED PRODUCTS

	DELIVERY OF ENGINES 1939	
	Single Engine DB-601	Double Engine
JANUARY	35	-
FEBRUARY	65	-
MARCH	63	-
APRIL	52	-
MAY	55	-
JUNE	55	-
JULY	60	-
AUGUST	40	-
SEPTEMBER	67	-
OCTOBER	73	-
NOVEMBER	70	-
DECEMBER	60	-
	695	-

Delivered To:	Single Engine
Dornier-Werke, Wismar	112
Arado, Warnemunde	253
Wierner-Neustadter Flugzeug-werke, Wiener-Neustadt	40
Erla-Werke, Leipzig	40
MIAG, Braunschweig	92
Gothaer Waggonfabrik, Gotha	20
Verschiedene Luftzeugamter	138
	695

	DELIVERY OF ENGINES 1940	
	Single Engine DB-601	Double Engine
	69	-
	91	-
	80	-
	85	-
	85	-
	85	-
	105	-
	107	-
	108	-
	125	-
	135	-
	140	-
	1215	

Delivered To:	Single Engine	Del
Arado, Warnemunde	125	Mes
Wiener-Neustadter Flugzeug-werke, Wierner-Neustadt	56	Mes
Messerschmitt, Regensburg	82	Lut
Erla-Werke, Leipzig	65	Foc
Fieseler Flugzeugwerke, Kassel	48	Got
Messerschmitt, Augsburg	258	Wie
MLG, Braunschweig	253	wer
Focke-Wulf, Bremen	91	Ars
Gothaer Waggon-Fabrik, Gotha	94	AGO
AGO, Oschersleben	32	Ver
Verschiedene Luftzeugamter	111	Erl
	1215	

	DELIVERY OF ENGINES 1942			
	Single Engine		Double Engine	
	DB-601	DB-605	DB-606	DB-610
JANUARY	63		5	
FEBRUARY	123		3	
MARCH	42		11	
APRIL	6	114	3	
MAY		286	4	
JUNE		172	30	
JULY		165	27	7
AUGUST		140	5	30
SEPTEMBER		154	4	42
OCTOBER		180	2	40
NOVEMBER		208	2	70
DECEMBER		172		52
	234	1591	96	241

Delivered To:				
Messerschmitt, Regensburg		37		
Wiener-Neustadter Flugzeugwerke	189	577		
Erla, Leipzig	1	291		
Gothaer Waggonfabrik Gotha		48		
Luther-Werke, Braunschweig		120		
Arado, Brandenburg			69	170
Daimler-Benz, Stuttgart-Untert			2	
Junkers, Dessau			2	
Heinkel, Oranienburg				58
Verschiedene Luftzeugamter	44	518	23	13
	234	1591	96	241

Delivered To:
Wiener-Neustadter Flugzeugwerke
Erla, Leipzig
Messerschmitt, Regensburg
Gothaer Waggonfabrik Gotha
Luther-Werke, Braunschweig
Daimler-Benz Sindelfingen
Arado, Brandenburg
Heinkel, Oranienburg
Heinkel, Rostock
Verschiedene Luftzeugamter

	DELIVERY OF ENGINES 1944	
	Single Engine DB-605	Double Engine DB-610
JANUARY	390	55
FEBRUARY	420	42
MARCH	470	52
APRIL	535	60
MAY	346	57
JUNE	486	83

werke, Wiener-Neustadt	40	Messerschmitt, Regensburg	82	Foc
Erla-Werke, Leipzig	40	Erla-Werke, Leipzig	65	Got
MIAG, Braunschweig	92	Fieseler Flugzeugwerke, Kassel	48	Wie
Gothaer Waggonfabrik, Gotha	20	Messerschmitt, Augsburg	258	wer
Verschiedene Luftzeugamter	138	MIAG, Braunschweig	253	ara
	695	Focke-Wulf, Bremen	91	AGO
		Gothaer Waggon-Fabrik, Gotha	94	Ver
		AGO, Oschersleben	32	Erl
		Verschiedene Luftzeugamter	111	
			1215	

DELIVERY OF ENGINES 1942

	Single Engine		Double Engine	
	DB-601	DB-605	DB-606	DB-610
JANUARY	63		5	
FEBRUARY	123		3	
MARCH	42		11	
APRIL	6	114	3	
MAY		286	4	
JUNE		172	30	
JULY		165	27	7
AUGUST		140	5	30
SEPTEMBER		154	4	42
OCTOBER		180	2	40
NOVEMBER		208	2	70
DECEMBER		172		52
	234	1591	96	241

Delivered To:

Messerschmitt, Regensburg		37		
Wiener-Neustadter Flugzeugwerke	189	577		
Erla, Leipzig	1	291		
Gothaer Waggonfabrik Gotha		48		
Luther-Werke, Braunschweig		120		
Arado, Brandenburg			69	170
Daimler-Benz, Stuttgart-Untert			2	
Junkers, Dessau			2	
Heinkel, Oranienburg				58
Verschiedene Luftzeugamter	44	518	23	13
	234	1591	96	241

Delivered To:
Wiener-Neustadter Flugzeugwerke
Erla, Leipzig
Messerschmitt, Regensburg
Gothaer Waggonfabrik Gotha
Luther-Werke, Braunschweig
Daimler-Benz Sindelfingen
Arado, Brandenburg
Heinkel, Oranienburg
Heinkel, Rostock
Verschiedene Luftzeugamter

DELIVERY OF ENGINES 1944

	Single Engine DB-605	Double Engine DB-610
JANUARY	390	55
FEBRUARY	420	42
MARCH	470	52
APRIL	535	60
MAY	346	57
JUNE	486	83
JULY	480	96
AUGUST	400	
SEPTEMBER	230	
OCTOBER	435	
NOVEMBER	585	
DECEMBER	500	
	5247	445

Delivered To:

Wiener-Neustadter Flugzeugwerke	726	
Erla, Leipzig	1492	
Messerschmitt, Regensburg	1347	
Gothaer Waggonfabrik Gotha	612	
Luther-Werke, Braunschweig	4	
Daimler-Benz Sindelfingen	413	
Daimler-Benz Genshagen	180	
Arado Brandenburg		200
Heinkel Oranienburg		188
Scholz & Co. Prag		56
Verschiedene Luftzeugamter	473	1
	5247	445

Delivered To:
Wiener-Neustadter Flugzeugwerke
Erla, Leipzig
Messerschmitt Regensburg
Daimler-Benz Stuttg.-Untertürkh
Verschiedene Luftzeugamter

MONTHLY DELIVERY JANUARY 1939 - MARCH 1945
and DESTINATION of DELIVERED PRODUCT

EXHIBIT H

DELIVERY OF ENGINES 1940

Single Engine DB-601	Double Engine
69	-
91	-
80	-
85	-
85	-
85	-
105	-
107	-
108	-
125	-
135	-
140	-
1215	

Delivered To:	Single Engine
Arado, Warnemunde	125
Wiener-Neustadter Flugzeug-werke, Wierner-Neustadt	56
Messerschmitt, Regensburg	82
Erla-Werke, Leipzig	65
Fieseler Flugzeugwerke, Kassel	48
Messerschmitt, Augsburg	258
MLaG, Braunschweig	253
Focke-Wulf, Bremen	91
Gothaer Waggon-Fabrik, Gotha	94
AGO, Oschersleben	32
Verschiedene Luftzeugamter	111
	1215

DELIVERY OF ENGINES 1941

Single Engine DB-601	Double Engine DB-605
126	
164	
160	
120	
45	
155	
170	
150	
140	4
139	8
148	7
129	15
1646	34

Delivered To:	Single Engine DB-601	Double Engine DB-605
Messerschmitt, Regensburg	68	
Messerschmitt, Augsburg	143	
Luther-Werke, Braunschweig	196	
Focke-Wulf, Bremen	25	
Gothaer Waggonfabrik, Gotha	106	
Wiener-Neustadter Flugzeug-werke, Wierner-Neustadt	323	
Arado, Brandenburg	85	6
AGO, Oschersleben	92	
Verschiedene Luftzeugamter	546	
Erla, Leipzig	61	28
	1646	34

1942

ouble Engine 06 DB-610
7
30
42
40
70
52
241

DELIVERY OF ENGINES 1943

Single Engine DB-605	Double Engine DB-610
210	35
255	8
360	-
230	12
150	32
220	40
215	40
260	55
233	52
275	55
462	36
400	60
3290	425

Delivered To:		
Wiener-Neustadter Flugzeugwerke	541	
Erla, Leipzig	490	
Messerschmitt, Regensburg	1032	
Gothaer Waggonfabrik Gotha	72	
Luther-Werke, Braunschweig	362	
Daimler-Benz Sindelfingen	123	
Arado, Brandenburg		71
Heinkel, Oranienburg		191
Heinkel, Rostock		129
Verschiedene Luftzeugamter	670	34
	3290	425

GINES 1944

Double Engine DB-610
55
42
52
60
57
83

DELIVERY OF ENGINES 1945

Single Engine DB-605
345
352
306

40	Messerschmitt, Regensburg	82	Focke-Wulf, Bremen	25
40	Erla-Werke, Leipzig	65	Gothaer Waggonfabrik, Gotha	106
92	Fieseler Flugzeugwerke, Kassel	48	Wiener-Neustadter Flugzeug-	
20	Messerschmitt, Augsburg	258	werke, Wierner-Neustadt	323
138	MLG, Braunschweig	253	Aredo, Brandenburg	65
695	Focke-Wulf, Bremen	91	ADO, Oschersleben	93
	Gothaer Waggon-Fabrik, Gotha	94	Verschiedene Luftzeugamter	546
	ADO, Oschersleben	32	Erla, Leipzig	61
	Verschiedene Luftzeugamter	111		1646
		1215		

DELIVERY OF ENGINES 1942

Single Engine DB-605	Double Engine DB-606	Double Engine DB-610
	5	
	3	
	11	
114	3	
286	4	
172	30	
165	27	7
140	5	30
154	4	42
180	2	40
208	2	70
172		52
1591	96	241

	Delivered To:	
37	Wiener-Neustadter Flugzeugwerke	
	Erla, Leipzig	
577	Messerschmitt, Regensburg	
291	Gothaer Waggonfabrik Gotha	
48	Luther-Werke, Braunschweig	
120	Daimler-Benz Sindelfingen	
	Aredo, Brandenburg	69
	Heinkel, Oranienburg	
	Heinkel, Rostock	2
	Verschiedene Luftzeugamter	2
		58
518		23
1591		96

DELIVERY OF ENGINES 1943

Single Engine DB-605	Double Engine DB-610
210	35
255	8
360	-
230	12
150	32
220	40
215	40
260	55
233	52
275	55
462	36
400	80
3290	425

541		
490		
1032		
72		
362		
123		
		71
		191
		129
670		34
3290		425

DELIVERY OF ENGINES 1944

Single Engine DB-605	Double Engine DB-610
390	55
420	42
470	52
535	60
346	57
486	83
480	96
400	
230	
405	
585	
500	
5247	445

	Delivered To:	
726	Wiener-Neustadter Flugzeugwerke	
1492	Erla, Leipzig	
1347	Messerschmitt Regensburg	
612	Daimler-Benz Stuttg.-Unterturkh.	
4	Verschiedene Luftzeugamter	
413		
180		
		200
		188
		56
473		1
5247		445

DELIVERY OF ENGINES 1945

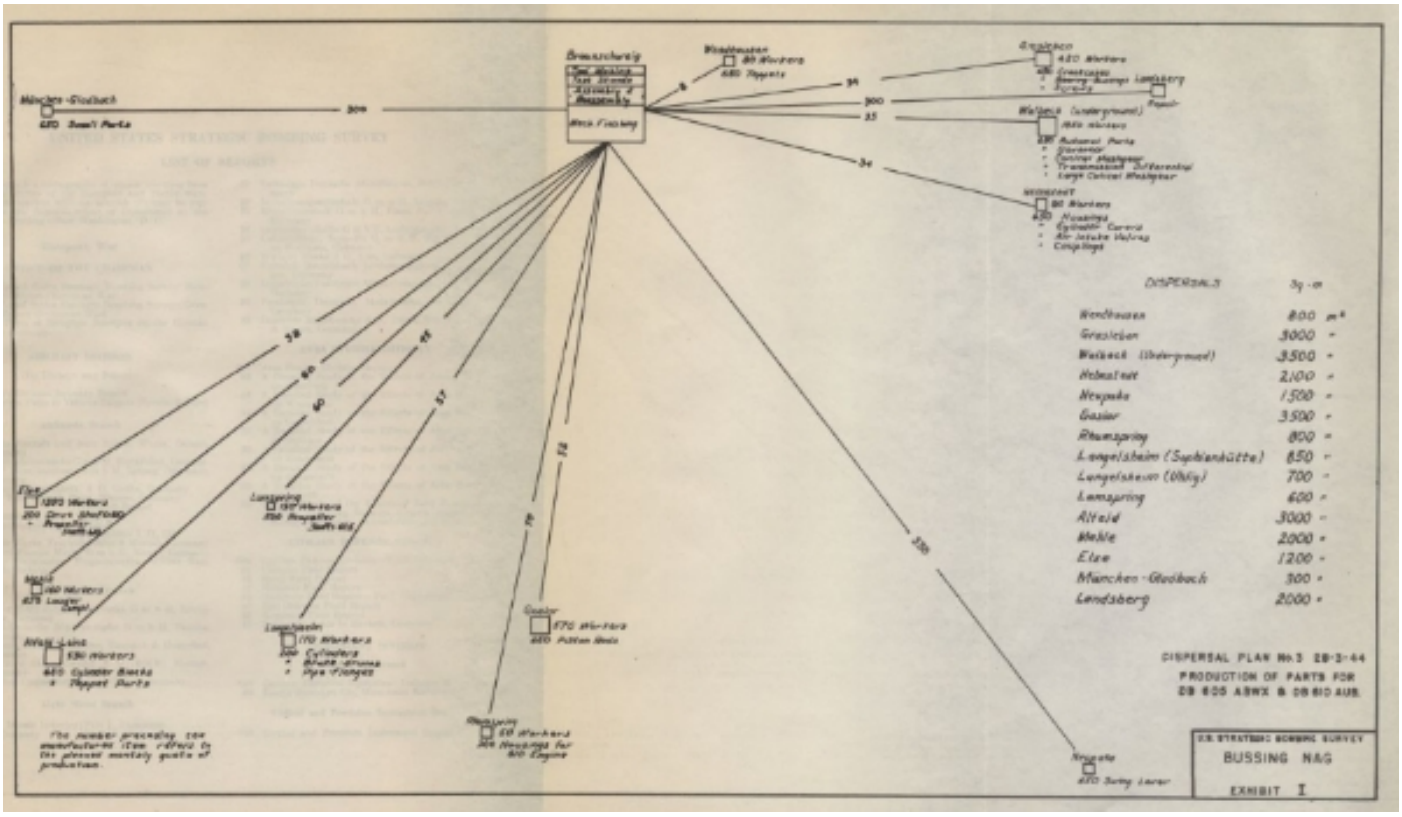
Single Engine DB-6
345
352
306
1003

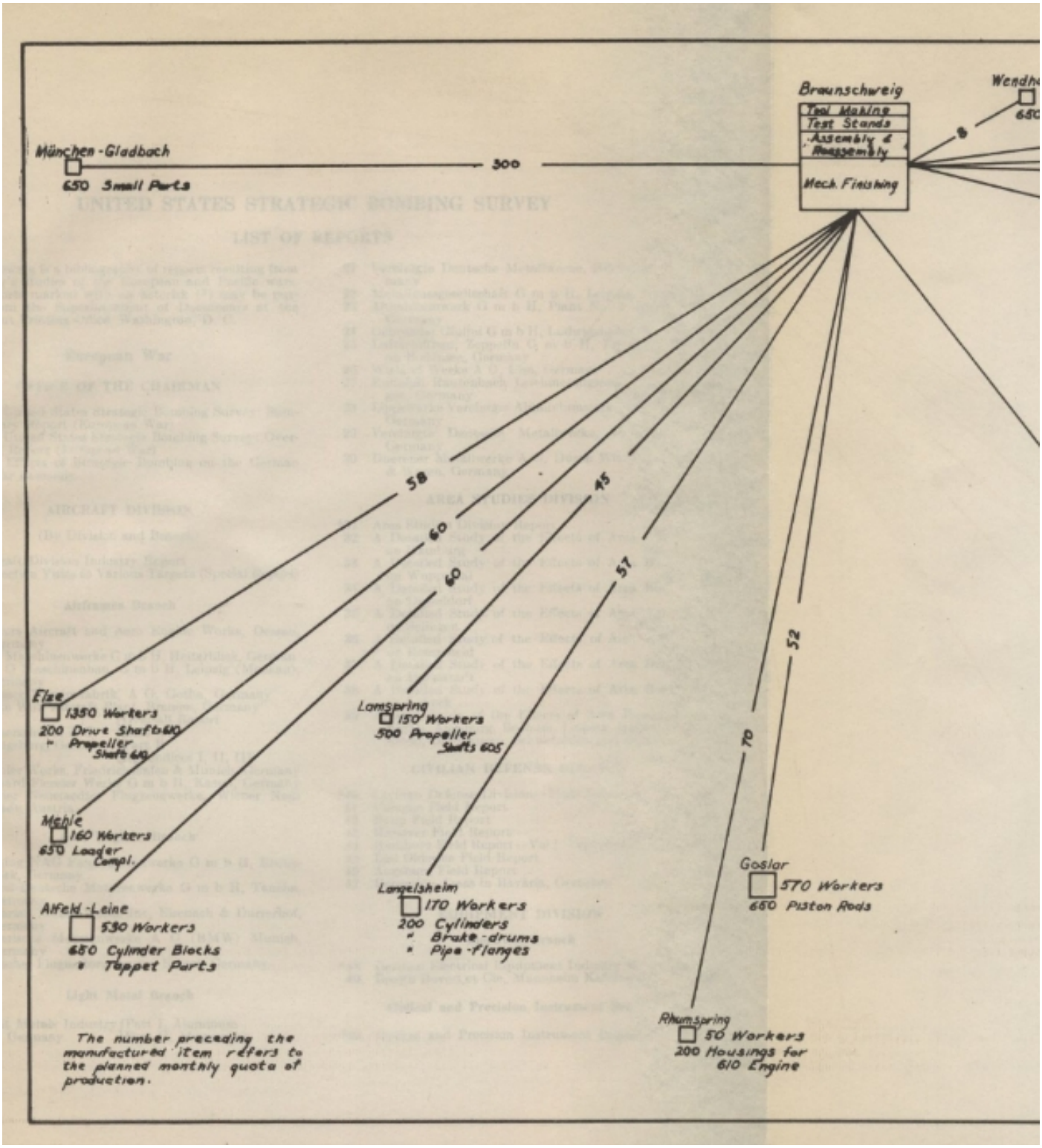
	Delivered To:
98	Wiener-Neustadter Flugzeugwerke
200	Erla, Leipzig
290	Messerschmitt Regensburg
1	Daimler-Benz Stuttg.-Unterturkh.
414	Verschiedene Luftzeugamter
1003	

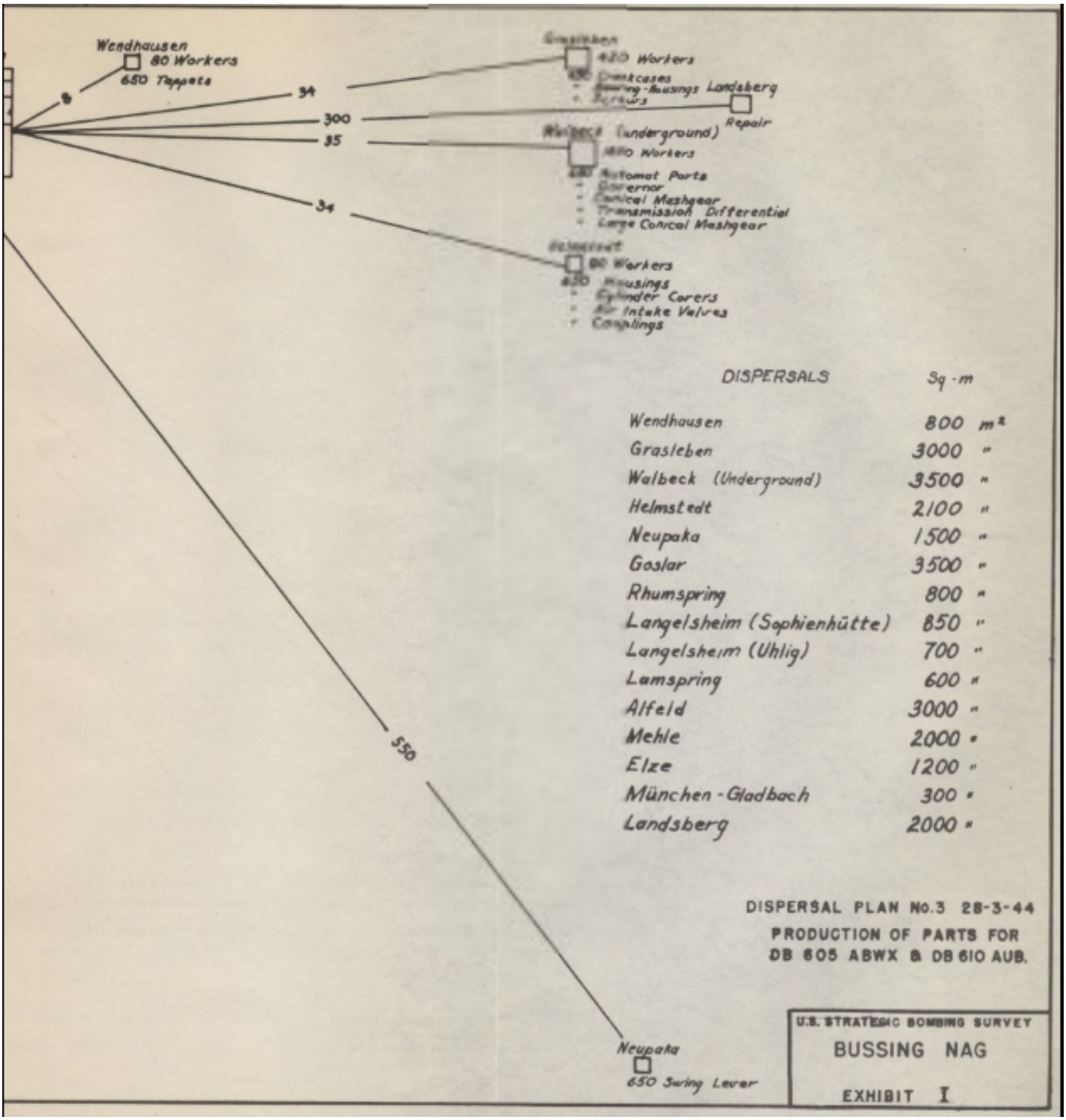
BUSSING-NAG FLUGMOTOREN WERKE G.M.B.H.

EXHIBIT I

MAP ILLUSTRATING BUSSING-NAG DISPERSAL


DISPERSALS
Sq-m
Wendhausen 800 m²
Grasleben 3000 "
Walbeck (Underground) 3500 "
Helmstedt 2100 "
Neupaka 1500 "
Gusiar 3500 "
Rheinspring 800 "
Langelsheim (Sophienhütte) 850 "
Langelsheim (Ohly) 700 "
Lamspring 600 "
Altaid 3000 "
Mehle 2000 "
Elze 1200 "
München-Gladbach 300 "
Landsberg 2000 "
DISPERSAL PLAN No.3 28-3-44
PRODUCTION OF PARTS FOR
DB 605 ASWX & DB 610 AUS.
U.S. STRATEGIC BOMBING SURVEY
BUSSING NAG
EXHIBIT I


Braunschweig
Tool Making
Test Stands
Assembly & Reassembly
Mech. Finishing
München-Gladbach
650 Small Parts
300
8
58
60
60
45
57
52
70
Elze
1350 Workers
200 Drive Shafts 640
" Propeller Shafts 640
Lamspring
150 Workers
500 Propeller Shafts 605
Mehle
160 Workers
650 Loader Compl.
Langelsheim
170 Workers
200 Cylinders
" Brake-drums
" Pipe-flanges
Goslar
570 Workers
650 Piston Rods
Alfeld-Leine
530 Workers
650 Cylinder Blocks
" Tappet Parts
Rhumspring
50 Workers
200 Housings for 610 Engine
The number preceding the manufactured item refers to the planned monthly quota of production.



DISPERSALS	Sq-m
Wendhausen	800 m²
Grasleben	3000 "
Walbeck (Underground)	3500 "
Helmstedt	2100 "
Neupaka	1500 "
Goslar	3500 "
Rhumspring	800 "
Langelsheim (Sophienhütte)	850 "
Langelsheim (Uhlig)	700 "
Lamspring	600 "
Alfeld	3000 "
Mehle	2000 "
Elze	1200 "
München-Gladbach	300 "
Landsberg	2000 "

DISPERSAL PLAN No.3 28-3-44
PRODUCTION OF PARTS FOR
DB 605 ABWX & DB 610 AUB.

U.S. STRATEGIC BOMBING SURVEY
BUSSING NAG
EXHIBIT I