

HUMBER COMBAT REPORT ON NIGHT OPERATIONS

1/2nd. FEBRUARY, 1944.

Berlin: Aachen: Krefeld: Serrate:

SUMMARY

1. Berlin 12 Mosquitoes, one of them equipped with H2S, left to attack Berlin. 10 reached the capital, 2 aiming at E. Dropped by the Y-aircraft, and the others bombing on D.R. One aircraft abandoned its task because of GEE failure; and one was lost without trace.
2. Aachen 3 Mk. I Mosquitoes were despatched against Aachen. One made a successfully controlled run, and one attacked the city area on D.R., because of BOE failure. The third aircraft returned early.
3. Krefeld 3 Mk. I Mosquitoes were despatched against Deutsche Edelstahlwerke at Krefeld. 2 attacked a COCK, and the third bombed Pees (S.E. of Smerich).
4. Serrate 3 Mosquitoes carried out offensive patrols, 2 in the Berlin area and one in the Aachen District. No hostiles were intercepted.

WEATHER FORECAST

5. Midnight frontal positions:- (1) occlusion from 63 N. 13 E. - N. Denmark - downwards, becoming; (2) cold to Yarmouth to S. of England and (3) warm to Zuyder Zee to Paris.

Bases:- N. of the front, well broken cloud with moderate to poor visibility, and fog possibly developing towards dawn. Cloud will be layered above 15,000' in area of cold front, with a narrow belt of light rain. Near the warm front, there will be cloud in several layers, and showers.

Germany:- Much strato-cumulus E. of 10° E. with a few breaks. Increasing medium cloud.

France:- Low stratus in P.M. Elsewhere, strato-cumulus will prevail; good clearances in central and southern areas, but extensive fog.

STATISTICS

	<u>Bombing</u>	<u>Serrate</u>
(a) No. of aircraft despatched.....	18	3
(b) " " " reporting attack on primary area.....	14	2
(c) " " " " " alternative area.....	1	0
(d) " " abortive sorties (tech. defect).....	2	1
(e) " " aircraft missing.....	1	0

WEATHER EXPERIENCE

6. Bases:- Overcast. Cloud well below 1,000' in many areas S. of the Humber. Showers and drizzle. Moderate to poor visibility.

Berlin, Aachen, Krefeld:- 10/10ths. over whole route, upper layers broken, but rising to 30,000' in places. Slight icing and static. Bumpy.

...../ENEMY DEFENCES.

KEY DEFENCES

8. No fighters were seen. The heavy guns were very accurate at Berlin. Slight opposition was met at Lachen and Krefeld. No searchlights exposed any target.

CASUALTIES

9. One Mosquito was lost on Berlin without trace. 2 others received flak damage.

MM/JT.
 DC/S. 26342/3/CRSL,
 18th. April, 1944.

FORM 100 (REVISED) 1/2/44
 1/2nd. FEBRUARY, 1944.

TARGET	GROUP	ALLOCATION TYPE	SERVICES	L/C SERVICES		SERVICES		DOWN- DRS	DAMAGE				REPAIR		
				PREL. AREA	ALL. AREA	OVER S.T.	NOT OVER S.T.		FLAK	FLAMING	DOWN IN FLIGHT	OTHER CAUSES	FLAK- IN	NO. REPAIR	H. E.
BERLIN	B	Group IV	12	10	-	-	1	1	2	-	-	-	-	-	P. 8.1
BERLIN	B	Group II	3	2	-	-	1	-	-	-	-	-	-	-	P. 1.5
KREFELD	S	Group II	1	1	-	-	-	-	-	-	-	-	-	-	P. 1.0
KREFELD	S	Group IV	2	1	1	-	-	-	-	-	-	-	-	-	P. 1.0
KREFELD TOTAL			3	2	1	-	-	-	-	-	-	-	-	-	
BERLIN TOTAL			15	12	1	-	2	1	2	-	-	-	-	-	
Berlin Area	100	Group II	2	1	-	-	1	-	-	-	-	-	-	-	
Lachen Area	100	Group II	1	1	-	-	-	-	-	-	-	-	-	-	
KREFELD TOTAL			3	2	-	-	1	-	-	-	-	-	-	-	
TOTAL			21	16	1	-	3	1	2	-	-	-	-	-	

MM/JT.
 O. S. S. 3.

BOMBER COMBAT REPORT ON THE OPERATIONS

2/3rd. FEBRUARY, 1944.

Elberfeld: Rheinhausen: Winklayin: Serrate: etc.

SUMMARY

1. Elberfeld 6 OBOE Mosquitoes (2 Mk. I and 4 Mk. II FOURTEEN-SEVEN) were despatched against the Jager ball-bearing works at Elberfeld. One Mk. I and 5 Mk. II aircraft made successfully controlled runs; one Mk. II aircraft released incorrectly over the built-up area of Elberfeld; and one Mk. I experienced OBOE failure and bombed Cologne on D.R. All returned unharmed.
2. Rheinhausen 7 Mk. I Mosquitoes were sent to attack the Hütte steelworks at Rheinhausen. 4 made successfully controlled runs; 2 attacked the city area, because of OBOE failure; and one bombed Hütte. All returned unharmed.
3. Winklayin 50 Halifaxes were detailed to lay mines in Kiel Harbour. 41 completed their task, laying 79 mines. The other 9 aircraft experienced H2S failure, and abandoned their task, since 10/10ths. cloud had been forecast over the target. None was lost, but one was wrecked in a landing accident.
4. Serrate: Met. Recon: 5 Mosquitoes carried out intruder patrols, without finding any combats; and another Mosquito completed a net-reconnaissance flight.

WEATHER FORECAST

5. Midnight frontal positions: (1) ... 53 N. 00 - 55 N. 10 E. - Berlin, then eastwards (2) ... 53 N. 00 - 55 N. 10 E. - 50 N. 07 1/2 W.

Bases:- The cold front will lie across E. Yorkshire at dusk, and will move southwards, reaching West India about midnight. For early take-off, 4 Group and southwards will have 10/10ths. at 1-2,000', 6 Group broken cloud at 1,500'. Later, conditions will improve, with well broken cloud above 1,000' and moderate visibility.

Germany:- 10/10ths. over whole country, base 1,000' and below. Kiel: main base 2,000', but patches of stratus at 600-1,000'. Tops 5-7,000', with layers of medium cloud above. Much icing at all heights.

N.W. France:- Strato-cumulus, base below 1,000', with drizzly showers.

Oslo:- Well broken strat-cumulus with medium cloud until 2100 hours, after which cloud will increase at all levels. Solid cloud to 10,000' over North Sea. Severe icing.

Skagerrak:- 10/10ths. low cloud, with several layers above.

SORTIES

		<u>Bombing</u>	<u>Mine-</u> <u>laying</u>	<u>(Serrate</u> <u>Met.Recon</u>
6.	(a) No. of aircraft despatched.....	13	50	6
	(b) " " " reporting attack on prim. area....	11	41	6
	(c) " " " " alt. "	2	0	0
	(d) " " abortive sorties (H2S failure).....	0	9	0
	(e) " " aircraft missing.....	0	0	0
	(f) " " mines laid.....		79	

...../WEATHER EXPERIENCED.

WEATHER EXPERIENCE

7. Elberfeld:- 9-10/10ths. strato-cumulus, tops 5-10,000'. Good visibility.

Rheinhausen:- 10/10ths., tops 5-7,000'. Good visibility.

Kiel Bay:- 7-3/10ths. layer clouds, tops 9,000'. Moderate visibility.

ENEMY DEFENSES

8. Fighters under running commentary control reacted to the mining of and our aircraft were plotted over Schleswig, S. Denmark and Kiel Bay. single-engined aircraft were seen over Schleswig-Holstein, but no combat Mosquitoes met slight but accurate flick over the Ruhr.

CASUALTIES

9. No aircraft was lost. (no Halifax down; while landing, and was in a collision with a stationary aircraft.

10 M/JA.
BC/S. 253, 2/3/CRS, 4,
19th. April, 1944.

272nd. Bombardment Group.

TARGET	GROUP	AIRCRAFT TYPE	SORTIES	NO. BOMBING STAGES OF		AIRCRAFT DAMAGED		A/C. BROKEN	KILLED	PARACHUTED	FUNG. IN FLAMES	OTHER DAMAGES	INTERESTING		RESULTS
				PREV. JOUR.	PREV. JOUR.	OVER E.T.	NOT OVER E.T.						ED	NOT ED		REMARKS
ELBERFELD	8	1 Mosq. IX 1 Mosq. IV	5 1	4 1	1	-	-	-	-	-	-	-	-	-	1 F. 3.6 1 P. 3.9 1 A. 3.5
ELBERFELD TOLL			6	5	1	-	-	-	-	-	-	-	-	-	
RHEINHAUSEN	8	1 Mosq. IX 1 Mosq. IV	5 2	4 2	1	-	-	-	-	-	-	-	-	-	1 F. 3.6 1 P. 3.9 1 A. 1.8
RHEINHAUSEN TOLL			7	6	1	-	-	-	-	-	-	-	-	-	
DO BING TOLL			13	11	2	-	-	-	-	-	-	-	-	-	
KIEL BAY	4	1 Hal. IIV 1 Hal. III	24 4	19 2	-	2	3	-	-	-	-	12	-	-	57 mines 4 mines
KIEL BAY TOLL	6	1 Hal. IIV 1 Hal. III	19 5	17 3	-	1	1	-	-	-	-	-	-	-	32 mines 6 mines
KIEL BAY TOLL			50	41	-	3	6	-	-	-	-	12	-	-	79 mines
GERMANY	100	1 Mosq. II	5	2	-	-	-	-	-	-	-	-	-	-	
GERMANY TOLL	8	1 Mosq. IV	1	1	-	-	-	-	-	-	-	-	-	-	
TOTAL			69	58	2	3	6	-	-	-	-	12	-	-	

10 M/JA.
D. R. S. 3.



BOMBER COMMAND REPORT ON NIGHT OPERATIONS

3/4th. FEBRUARY, 1944.

Dortmund: Cologne: Krefeld: Minelaying: etc.

SUMMARY

- 1. Dortmund 4 Mosquitoes (one G-II and 3 non-OBCE) were despatched to Dortmund. The G-II aircraft made a successfully controlled run, and dropped red T.I., which were bombed by one aircraft. Another experienced GLE failure and attacked Essen; and the fourth returned early for technical reasons.
- 2. Cologne 3 non-OBCE Mosquitoes bombed Cologne on D.R. from GEE fixes.
- 3. Krefeld 7 Mk.I OBCE Mosquitoes were detailed to attack Deutsche Edelstahlwerke at Krefeld. 4 made successfully controlled runs. The other 3 had OBCE failure, and bombed on D.R., 2 attacking Krefeld and one Essen.
- 4. Minelaying 35 Wellingtons, Stirlings and Halifaxes were detailed to lay mines off the French Channel and Atlantic ports. 32 completed their task, laying 92 mines.
- 5. Leaflets etc. 4 Wellingtons and 7 U.S. Fortresses scattered leaflets over Northern France. One Mosquito carried out a det. reconnaissance flight.

No aircraft was lost.

WEATHER FORECAST

Midnight frontal positions:- (1) occlusion from Frankfurt - 55 N. 14 E. - 60 N. 14 E. - 61 N. 20 E. - (2) cold from Bordeaux - Munich - 51 N. 20 E.

Bases:- Bit all night. Cloud will disperse. Moderate visibility.

Germany:- Heavy convection along over North Sea, tops below 15,000' in broken convection and strato-cumulus over North Sea coast. Convection cloud to great heights along occlusion. 10/10ths. strato-cumulus E. and S. of occlusion, with medium cloud above. Light rain along cold front.

France:- 10/10ths. strato-cumulus and low stratus E. of cold front. Good clearances in residual convection cloud N. of front. Le Havre: small amounts of cumulus, base 2,000', tops 10,000'. Westwards from Le Havre to Brest, cloud will gradually increase to 6-8/10ths., base 1,500', tops 6-10,000', with isolated showers. These conditions will hold as far as St. Malo.

SORTIES

		<u>Bomb.</u>	<u>Mine.</u>	<u>Etc.</u>
(a)	No. of aircraft despatched.....	14	35	5
(b)	" " " reporting attack on primary area.....	11	32	5
(c)	" " " " alternative areas.....	2	0	0
(d)	" " abortive sorties (tech. defect).....	1	3	0
(e)	" " aircraft missing.....	0	0	0
(f)	" " mines laid.....		92	

...../WEATHER EXPERIENCED.

WEATHER EXPERIENCED

8. Bases:- Fit all night, apart from winty showers towards dawn. Moderate to good visibility.

Ruhr:- 5/10ths. cumulus, tops 10-12,000', with thin patches of c

W.France:- 6-3/10ths. strato-cumulus, base 1,500-2,000', as far 44°N.; thence rain and 10/10ths. thick layer cloud to Spanish coast, with base sometimes at surface. Wind at 2,000': 330°/40 m. at an H., 330° in S.

ENEMY DEFENSES

9. Fighters were active over Holland and the Rhineland, but none were seen these areas. 2 were observed over the Bay of Biscay, but they did not attack. Slight flak was met over the Ruhr, where 2 aircraft were hit.

CASUALTIES

10. No losses were sustained.

HEM/JT.
EC/C. 26342/6/CRS4,
21st. April, 1944.

LOADING: CARGO: AIRCRAFT: (Including) Bombers: 2nd. Bombers: 2nd. Bombers: 2nd.

TAGNO	GROUP	AIRCRAFT TYPE	BOMBERS	A/C REPORTED				CARGO				INTERIORS		BOMB TONNAGE	R.E.
				PREL. REL.	ACT. REL.	OVER H.M.	OVER H.S.	WGT.	VAL.	WGT.	VAL.	WGT.	VAL.		
BOEING	8	Bomb. IX Bomb. IV	2	2	-	-	-	-	-	-	-	-	-	-	1.3
BOEING TOTAL			4	2	1	1	-	-	-	-	-	-	-	-	.9
BOEING	8	Bomb. IX Bomb. IV	2	2	-	-	-	-	-	-	-	-	-	-	2.7
BOEING	8	Bomb. IX Bomb. IV	4	4	-	-	-	-	-	-	-	-	-	-	3.6
BOEING TOTAL			7	6	1	-	-	-	-	-	-	-	-	-	1.8
BOEING TOTAL			14	11	2	1	-	-	-	-	-	-	-	-	.9
BOEING	1	Bomb. X	4	4	-	-	-	-	-	-	-	-	-	-	8 tons
BOEING	1	Bomb. X	3	3	-	-	-	-	-	-	-	-	-	-	6 tons
BOEING	3	Bomb. III	2	2	-	-	-	-	-	-	-	-	-	-	12 tons
BOEING	3	Bomb. III	2	1	-	-	-	-	-	-	-	-	-	-	6 tons
BOEING	3	Bomb. III	2	2	-	-	-	-	-	-	-	-	-	-	12 tons
BOEING	3	Bomb. III	2	2	-	-	-	-	-	-	-	-	-	-	12 tons
BOEING	4	Bomb. IIAV	8	8	-	-	-	-	-	-	-	-	-	-	16 tons
BOEING	6	Bomb. IIAV	12	10	-	-	-	-	-	-	-	-	-	-	20 tons
BOEING TOTAL			35	32	-	-	-	-	-	-	-	-	-	-	92 tons
BOEING	92	Bomb. X	4	4	-	-	-	-	-	-	-	-	-	-	-
BOEING	8	Bomb. IV	1	1	-	-	-	-	-	-	-	-	-	-	-
TOTAL			56	48	2	2	2	-	-	-	-	-	-	-	1
BOEING	USAC	Portress	7	7	-	-	-	-	-	-	-	-	-	-	-

BOEING
C. 1. 3. 3.

NO. 1111
19

BOEER COMBINED REPORT ON NIGHT OPERATIONS

4/5th. FEBRUARY, 1944.

Elberfeld: Frankfurt: Aachen: Mindelaying: Serrate:

SUMMARY

1. Elberfeld 8 Mk.II OBOE Mosquitoes (4 PERWIPER and 4 FOUNTAIN PEN) were sent to attack the Jaeger ball-bearing works at Elberfeld. One PERWIPER made a successfully controlled run; 2 aircraft of each type experienced OBOE failure and bombed the city on D.R.; 2 FOUNTAIN PEN aircraft attacked Cologne; and the remaining PERWIPER returned with engine trouble.
2. Frankfurt 9 non-OBOE Mosquitoes (one equipped with H2S) were sent on a harassing raid against Frankfurt. The H2S aircraft found its equipment useless, and attacked the city on D.R., together with 5 other aircraft. One Mosquito attacked defences in the Plankenhain area; and the other 2 returned early.
3. Aachen 2 Mk.I Mosquitoes were sent to Aachen; but both experienced partial OBOE failure and bombed the primary area on D.R.
4. Mindelaying etc. 28 Wellingtons, Stirlings and Halifaxes laid 67 mines in the Bay of Biscay. Mosquitoes carried out 21 reconnaissance flights and offensive patrols; and U.S. Postresses dispersed leaflets over Northern France and the Low Countries. No aircraft was lost or damaged on this night.

WEATHER FORECAST

6. Bases:- Convection cloud with heavy showers near East coast. Good clearances and good visibility inland.

Germany:- Heavy convection cloud, tops above 20,000', will penetrate from the North Sea deep into Germany, accompanied by frequent squally showers of snow or hail. Good clearances in S. Germany.

France:- Patchy layer cloud inland, with extensive clear areas. Broken strato-cumulus over W. coast: 1/4 cover, base 2,000', tops 6-7,000'. Snow showers in N.E.

SCORES

		<u>Bombing</u>	<u>Mindelaying</u>	<u>Other</u>
				<u>Ops.</u>
7.	(a) No. of aircraft despatched.....	19	23	3
	(b) " " " reporting attack on primary area.....	13	28	3
	(c) " " " " " alt. areas.....	3	0	0
	(d) " " abortive sorties (tech.defect).....	3	0	0
	(e) " " aircraft missing.....	0	0	0
	(f) " " mines laid.....		67	

WEATHER EXPERIENCED

8. Bases:- Fit. Local wintry showers over East coast.

Ruhr-Rhineland:- 7-10/10ths. tops 9-15,000'.

W. France:- 7-10/10ths., base 2,500-4,000'. Local breaks to nil. Good visibility.

..... ENEMY DEFENCES.

ENEMY DEFENCES

9. One fighter was seen over the Bay of Biscay, but it made no attack. Slight flak was met from the Ruhr, and from defended points in France.

CASUALTIES

10. All aircraft returned undamaged.

MLM/JT.
BC/S. 26 2/6/ORS4,
21st. April, 1944.

Report Form 100 (Rev. 1/25/43)
1/25/43 (Rev. 1/25/43)

T. UNIT	GROUP	SQUADRON	SQUADRS	A/C REPORTING		AGGRESSIVE		MIS- SIC	FLY- ING	FIGHTER	MISS. IN FLIGHT	OTHER CAUSES	DAMAGE		LOSS TOTAL
				W/OUT FUEL	W/IN FUEL	OVER SEA	NOT OVER SEA						BY ENEMY	BY F.A.C.	
BRUNSWICK	8	Squad IX	8	5	2	1	-	-	-	-	-	-	-	-	2. 1.1 3. area 3.6
FLORIN	8	Squad IV	9	6	1	-	2	-	-	-	-	-	-	-	1. 4.7 2. .9
ROBIN	8	Squad IX Squad IV	1 1	1 1	-	-	-	-	-	-	-	-	-	-	1. - 2. area 1.8
ROBIN TOTAL			2	2	-	-	-	-	-	-	-	-	-	-	
ROBIN TOTAL			19	13	3	1	2	-	-	-	-	-	-	-	
WELLS	1	Squad X	6	6	-	-	-	-	-	-	-	-	-	-	12 mins
GRANDE	3	Squad III	12	12	-	-	-	-	-	-	-	-	-	-	35 mins
L. BAKER	4	Squad IIIV	6	6	-	-	-	-	-	-	-	-	-	-	12 mins
ST. MARY	4	Squad IV	4	4	-	-	-	-	-	-	-	-	-	-	8 mins
WELLS TOTAL			28	28	-	-	-	-	-	-	-	-	-	1	67 mins
SEAL	100	Squad II	2	2	-	-	-	-	-	-	-	-	-	-	
WELLS	8	Squad IV	1	1	-	-	-	-	-	-	-	-	-	-	
TOTAL			50	44	3	1	2	-	-	-	-	-	-	1	
WELLS	WELLS	Fortress	7	7	-	-	-	-	-	-	-	-	-	-	

* REFERENCES TO: C. UNIT; L. UNIT; T. UNIT; L. UNIT; M. UNIT; A. UNIT; W. UNIT;

BCB/JT.
O.R.S. 3.

Hannover:- No clear. 100% visibility.

Oslo-Friedrikstad:- 7-10/10ths. over Horta 3000, tops 10,000', but clear sky over targets. Bright moonlight.

KEY DEFENCES

8. 2 fighters were seen over Norway and 3 over Horta, but no attacks were made. Mosquito on offensive patrol 1000-1100 off the Dutch coast. Moderate flak opposition was met in the area of the coast.

CASUALTIES

9. All aircraft returned safely. One was slightly damaged by flak off the Norwegian coast.

MLV/T.
BC/S: 2642/6/CRS4,
21st. April, 1944.

5/6th. FEBRUARY, 1944.

TARGET	GROUP	AIRCRAFT TYPE	BOMBING	A/C REPORTING ATTACK OF		HOSTILE SORTIES		MIS-ING	DAMAGE		OTHER	INTERCEPTED		BOMB TONNAGE
				PREL. AREA	ALL. AREA	OVER E.T.	NOT OVER E.T.		FLAK	FIGHTER		MISC. IN FLIGHT	ATTACKED		NOT ATTACKED
BERGLEN	8	Mosq. IX	4	4	-	-	-	-	-	-	-	-	-	P. 13.4
		Mosq. IV	14	11	2	-	1	-	-	-	-	-	-	A. 9
BERGLEN TOTAL			18	15	2	-	1	-	-	-	-	-	-	
DUNDEVA	8	Mosq. IX	4	3	-	-	1	-	-	-	-	-	-	P. 1.3
		Mosq. IV	3	2	-	-	1	-	-	-	-	-	-	P. area 2.7
DUNDEVA TOTAL			7	5	-	-	1	1	-	-	-	-	-	
HJEMNER	8	Mosq. IV	1	1	-	-	-	-	-	-	-	-	-	P. .7
HJEMNER TOTAL			26	21	2	-	1	2	-	-	-	-	-	
HEMELVAEG	4	Hal. IESV	8	5	-	-	2	1	-	-	-	-	-	10 mines
OSLO HARBOR	6	Hal. IESV	11	11	-	-	-	-	1	-	-	-	-	22 mines
HEMELVAEG TOTAL			19	16	-	-	2	1	-	1	-	-	-	32 mines
LEAPLEN	91	Well. Ic	5	5	-	-	-	-	-	-	-	-	-	-
		Well. I	1	1	-	-	-	-	-	-	-	-	-	-
		Well. Ic	1	1	-	-	-	-	-	-	-	-	-	-
		Well. III	2	2	-	-	-	-	-	-	-	-	-	-
LEAPLEN	93	Well. I	6	6	-	-	-	-	-	-	-	-	-	-
		Well. I	6	6	-	-	-	-	-	-	-	-	-	-
LEAPLEN TOTAL			15	15	-	-	-	-	-	-	-	-	-	
SEBRATE	100	Mosq. IV	3	3	-	-	-	-	-	-	-	-	-	-
VEP. ARCOO	8	Mosq. IV	1	1	-	-	-	-	-	-	-	-	-	-
TOTAL			64	56	2	-	3	3	-	1	-	-	-	-
LEAPLES	OS. BC	Portrean	5	5	-	-	-	-	-	-	-	-	-	-

BCR/JT.
O.R.S. 3.

* NOT INCLUDED IN TOTAL.

POSTURES TO:- BRUSSELS: 10000-600-64 BUR: 100000: 6000:
91 Group to:- BELLEVILLE: 10000: 6000:
93 Group to:- BELLEVILLE: 10000: 6000:

BOEHR COMBAT REPORT ON NIGHT OPERATIONS

7/8th. FEBRUARY, 1944.

Elberfeld: Krefeld: Aachen: Mannheim: Frankfurt: Serrate:

Elberfeld 3 He. II Mosquitoes (4 FFWIPER and 1 FOUYAIN PEI) were sent to attack the Jaeger ball-bearing works at Elberfeld. One FFWIPER and 3 FOUYAIN PEI made successfully controlled runs; the rest experienced OBOE failure and attacked the city area on D.R.

Krefeld 5 He. I Mosquitoes were despatched against the Edel steel works at Krefeld. 3 made successfully controlled runs; the other 2 experienced OBOE failure and attacked the city area on D.R.

Aachen 2 He. I Mosquitoes were sent to Aachen, but both experienced OBOE failure and bombed the city area on D.R.

Mannheim One He. I Mosquito attacked Mannheim, and dropped route markers and incendiaries to assist the bombers flying to Frankfurt.

Frankfurt 19 Mosquitoes, not fitted with precision devices, bombed Frankfurt on D.R.

Serrate 4 Mosquitoes of 100 Group carried out offensive patrols over and enemy-occupied territory, without intercepting any hostiles.

SYNOPSIS

Midnight frontal positions: (1) cold front 60 N. 15 W. - 55 N. 14 E. - 50 N. 13 E.

Basics:- Little cloud. Good visibility.

Germany:- Cold front will affect the Ruhr at 2200, and Frankfurt at 0300, with solid cloud from 15,000' to 31,000'. Much cloud S. and E. of front. A convection cloud further W.

France:- Much cloud, based near the ground.

	<u>Loebing</u>	<u>Serrate</u>
(a) No. of aircraft despatched.....	35	4
(b) " " " reporting attack on primary area.....	35	4
(c) " " " missing.....	0	0

EXPERIENCED

Basics:- Fit all night.

Ruhr-Rhineland:- 10/10ths. strato-cumulus, tops 6-8,000'. 7-9/10ths.

ENEMY DEFENSES

11. No fighters were seen. Intense and accurate flak was met over Krefeld and Elberfeld, but little opposition was encountered at Frankfurt.

C.S.U. LOSS

12. All aircraft returned safely. One was slightly damaged by flak over Frankfurt.

U. S. T. C.

13. 6 Fortresses scattered leaflets over the Low Countries and Northern

MEM/VT.

EC/S. 26342/6/OPSL4,
22nd. April, 1944.

TARGET	GROUP	EXECPY TYPE	CONTING	NO. BOMBERS		NO. BOMBS		MISC. DTS	RESULTS				DO'S
				PLACED ON	OVER	PLACED	OVER		FLAK	FLAKING	MISC. IN FLIGHT	OTHER	
				RE.	RE.	S.T.	RE.						
KREFELD	B	Noaq. IX	8	8	-	-	-	-	-	-	-	-	P. 3.6 P. area 3.6
KREFELD	B	Noaq. IX	4	4	-	-	-	-	-	-	-	-	P. 2.7 P. area 1.8
		Noaq. IV	1	1	-	-	-	-	-	-	-	-	
KREFELD TOLL			5	5	-	-	-	-	-	-	-	-	
...CHEN	B	Noaq. IX	1	1	-	-	-	-	-	-	-	-	P. area 1.6
		Noaq. IV	1	1	-	-	-	-	-	-	-	-	
...CHEN TOLL			2	2	-	-	-	-	-	-	-	-	
FRANKFURT	B	Noaq. IX	5	5	-	-	-	-	1	-	-	-	P. 16.7
		Noaq. IV	14	14	-	-	-	-	-	-	-	-	
FRANKFURT TOLL			19	19	-	-	-	-	1	-	-	-	
...CHEN (A Route-marking for Frankfurt)	B	Noaq. IV	1	1	-	-	-	-	-	-	-	-	P. .4
BOMBING TOLL			35	35	-	-	-	-	1	-	-	-	
SEGLATE	100	Noaq. II	4	4	-	-	-	-	-	-	-	-	
TOTAL			39	39	-	-	-	-	1	-	-	-	
LE.FLETS	USAC	Fortress	6	6	-	-	-	-	-	-	-	-	

* NOT INCLUDED IN TOTAL.

MEM/VT.
C. R. S. J.

FO. SERVICES TO: - BRUSSELS; LIEGE; JOFFELP; GREN; ABECLU.

BOMBING COMBINED REPORT ON NIGHT OPERATIONS

8/9th FEBRUARY, 1944.



Limoges : Brunswick : Elberfeld : Leaflets etc.

PRIMARY

Limoges. 12 Lancasters of 617 Squadron attacked the Gnome et Rhone engine works at Limoges, dropping 12,000 lb. bombs with extraordinary effect. The factory sustained crippling damage. All the Lancasters returned undamaged.

Brunswick. 11 Mosquitoes (including one Y-aircraft) were sent on a passing raid against Brunswick. The Y-aircraft dropped T.I., but these were obscured by the thick cloud covering the target, and the other 10 aircraft bombed D.R. from GEE fixes or from routemarkers. All returned undamaged.

Elberfeld. 8 Mk.II Mosquitoes (4 PENWIPER and 4 FOUNTAIN PEN) were dispatched against the Jaeger ball-bearing works at Elberfeld. 3 FOUNTAIN PEN aircraft made successfully controlled runs, the fourth abandoning its task for technical reasons. All the PENWIPER experienced OBOE failure; one attacked D.R. on D.R., 2 bombed Essen and one returned early. None was lost.

Other operations. 19 Wellingtons and Whitleys were sent to scatter leaflets over Northern France; 18 completed their task. Mosquitoes carried out intensive patrols and net. reconnaissance flights. None was lost.

OTHER FORECAST

Bases:- Fit all night. Local smoke troubles.

Germany:- Convection cloud will tower to great heights over the E. North Sea and spread inland over the plain of N. Germany, gradually decreasing in intensity. Good clearances in residual convection cloud over Middle Rhine. Clear sky and good visibility E. of 11°E. Broken convection cloud in S., tops below 10,000'. Ruhr, Brunswick: 6-8/10ths. convection cloud, tops 15,000' locally.

France:- Much strato-cumulus in N.W., with increasing medium cloud and low level rain in latter part of night. Patchy strato-cumulus in N.E. and central France, with extensive clear areas. Limoges: 3-2 chance of loss than the strato-cumulus; thin layer of cirrus stratus at 30,000', which may slightly dim the moonlight.

	<u>Bombing</u>	<u>Other Ops.</u>
(a) No. of aircraft despatched.....	31	25
(b) No. of aircraft reporting attack on primary area....	27	24
(c) No. of aircraft reporting attack on alt. area....	2	0
(d) No. of abortive sorties (tech. defect)...	2	1
(e) No. of aircraft missing.....	0	0

SECOND EXPERIENCED

Bases:- Fit all night.

Limoges:- 2-3/10ths patchy strato-cumulus; clear over factory. Full moon, excellent visibility.

Brunswick:- 10/10ths cumulus and strato-cumulus, tops 10-12,000'.

Elberfeld:- 7-8/10ths cumulus and strato-cumulus, tops 10-15,000. Good visibility and good visibility.

NARRATIVE OF ATTACK (Limoges)

8. 12 Lancasters attacked the target, using SABS Mk.IIa. 5 carried 1x12 H.C., 5 carried 11x1,000 M.C., and 2 carried 30-lb. I.B. and red spot fires. The 1st Lanc. marked the target with incendiaries and the other aircraft bombed the M.P.I. of the fires thus raised. Night photographs showed the incendiaries lying in a stick from east to west, with the centre of the stick 310 yards E. of the aiming-point, and the western end of the stick overlapping the eastern corner of the factory. 5x12,000 lb. bombs were plotted, 4 on the target and the fifth over the far bank of the river. 4 sticks of 1,000 lb. bombs were plotted, 3 of which straddled the target, while the other lay across the nearby railway yard. The M.P.I. of the fires and markers was almost identical with the middle of the factory, and the average error about this point was 150 yards.

DAY RECONNAISSANCE (Limoges).

9. Photographs of the target were not obtained until Feb. 26th. They show that extremely heavy damage had been inflicted on this important factory. Machine-shops, housed in 9 medium-sized and multi-bay buildings, and one large multi-bay building, all suffered very severely, 21 bays out of a total of 100 were completely destroyed, 3 were badly damaged and 17 more sustained roof displacement. One building of the boiler-house and transformer station was destroyed, and the roof lights of the boiler-house were smashed. Other buildings destroyed or damaged included the former assembly buildings, assembly and experimental shop, offices and unidentified buildings and the 2 water towers on the S.E. side of the site. The road bounding the N.W. of the site had its parapet wall demolished in several places, and the road sustained a direct hit a few yards short of the bridge over the marshalling-yards.

ENEMY DEFENCES

10. There was a little fighter activity over Holland and N.W. Germany, but no attacks were reported. One fighter was seen in the Quackenbruck area. No defences were encountered at Limoges. Slight flak was met from Brunswick and Eiberfeld, as well as from the usual points in N. France.

CASUALTIES

11. All our aircraft returned safely. One Whitley was damaged by flak in Cherbourg area.

U.S.B.C.

12. 6 Portresses scattered leaflets over Northern France without loss.

ML/PWR
BC/S.26342/2/ORS4.
1st May, 1944.

TARGET	GROUP	ALBUQUERQUE TYPE	SHORTS	NO REPORTS		NO REPORTS		PLAS-110	PLAS-110	FOLLYE	MISC. IN PLDRT	OTHER CITIES	HYDRA-2	LOC. ATTACKED	TOTAL
				PRE-ARR.	ADT. ARR.	OVER B.T.	OVER 27.								
BALTIMORE	8	Neug. II Neug. IV	1 10	1 10	-	-	-	-	-	-	-	-	-	-	4.9.2
BOSTON TOTAL			11	11	-	-	-	-	-	-	-	-	-	-	1
CHICAGO	8	Neug. IX	8	4	2	1	1	-	-	-	-	-	-	-	7.2.6 Area 9 1.8
LA SAGE	5	Lanc. I	12	12	-	-	-	-	-	-	-	-	-	-	2.51.5 Area 7 (5x12,000lb)
BOSTON TOTAL			31	27	2	1	1	-	-	-	-	-	-	-	1
NEW YORK W.F. BOSTON	91	Neil. II Neil. X What.	5 1 5	5 1 4	-	-	-	-	-	-	-	-	-	-	-
	92	Neil. X	8	8	-	-	-	-	-	-	-	-	-	-	-
NEW YORK TOTAL			19	18	-	-	1	-	1.0	-	-	-	-	-	-
SERVICES	100	Neug. II	5	4	-	-	-	-	-	-	-	-	-	-	-
W.F. BOSTON	8	Neug. IV	2	2	-	-	-	-	-	-	-	-	-	-	-
T O T A L			56	51	2	1	2	-	1.0	-	-	-	-	-	1
W.F. BOSTON	W.F. BOSTON	Portress	6	6	-	-	-	-	-	-	-	-	-	-	-

NOA/ST.
D.R.S.S.

91 Group: - BOSTON: W.F. BOSTON: VERMONT:
 92 Group: - BOSTON: W.F. BOSTON: W.F. BOSTON: W.F. BOSTON: W.F. BOSTON: W.F. BOSTON:
 Portress: to: - PARIS: W.F. BOSTON: W.F. BOSTON: W.F. BOSTON:
 * NOT INCLUDED IN TOTAL.

RAID TRACK AND BOMB PLOT NOT AVAILABLE

BOEHR COMMAND REPORT ON NIGHT OPERATIONS

9/10th. FEBRUARY, 1944.

Elberfeld: Krefeld: Aachen:

Elberfeld 8 OBOE Mk.II Mosquitoes (4 PEPPER and 4 FOURTAIN-FEI) were pitched against the Jaeger ball-bearing works at Elberfeld. 2 PEPPER and FOURTAIN-FEI aircraft made successfully controlled runs; the rest had OBOE runs and bombed on D.R., 2 in the primary area, 2 at Gladbach and one at E. All returned undamaged.

Krefeld 7 Mk.I Mosquitoes were sent to attack Deutsche Bleistahlwerke Krefeld. 6 made successfully controlled runs; the seventh bombed on D.R. on a precision fix. One of the successful aircraft did not return.

Aachen One Mk.I Mosquito was sent to Aachen; it made a successfully controlled run, but released incorrectly, overshooting by $\frac{1}{2}$ mile.

WRECKAGE LIST

Midnight frontal positions: (1) wave from 56 W. 12 E. - Kiel - Brussels held from 56 W. 12 E. - Spitz - Yorkshire. (3) wave from Cape Wrath - Isle of Skye - Scilly.

Bases:- 10/10ths. cloud in several layers, base mainly 1,000'.

Germany:- Much layered cloud, base 1,500-2,000'. Belt of wintry precipitation along cold front over North Sea, with cloud towering to great heights.

France:- Much medium and strato-cumulus in N. A. Well broken medium in S.

RESULTS

(a) No. of aircraft despatched.....	16
(b) " " " reporting attack on primary area.....	12
(c) " " " alternative area.....	3
(d) " " " missing.....	1*

* This aircraft is known to have attacked the primary area.

WRECKAGE EXPERIENCED

Wahr:- No cloud. Excellent visibility.

REMARKS

Fighters were active over Holland, but none were seen by our crews. The heavy flak was met at Elberfeld and Aachen, and moderate opposition at Krefeld.

NOTES

One Mk.I Mosquito was lost to unknown causes while returning from Krefeld. The others returned undamaged.

342/6/CRS4.
April, 1944.

TARGET	GROUP	AIRCRAFT TYPE	SORTIES	A/C RESPONSE		A/C STATUS		MISS- LE	DISEASE				BOOM TOWERS	
				PRE- -REL.	INT. -REL.	OVER S.T.	NO. OVER S.T.		FLY	DISPER	MISC. IN FLIGHT	OTHER CANCEL		WLCI- ID	CC CHECK ID
RESEARCH	C	Mosq. IX	8	5	3	-	-	-	-	-	-	-	-	P. 2.4 P. Area 1.8 M. 2.7
RESEARCH	B	Mosq. IX	4	4	-	-	-	-	-	-	-	-	-	
		Mosq. IV	3	2	-	-	-	1	-	-	-	-	-	
RESEARCH TOLL			7	6	-	-	-	1	-	-	-	-	-	P. 4.5 P. Area .9 M. .9
RESEARCH	B	Mosq. IX	1	1	-	-	-	-	-	-	-	-	-	P. .9
T O T A L			16	12	3	-	-	1	-	-	-	-	-	

BOB/VT.
C. S. S.

WING COMMAND REPORT ON NIGHT OPERATIONS

10/11th. FEBRUARY, 1944.

Berlin: Aachen: Mine-laying: etc.

OPERATIONS

Berlin 21 non-OBOS Mosquitoes (including one equipped with H2S) were sent on a harassing raid to Berlin. The H2S aircraft dropped T.I., but these were not seen through the clouds. 12 other aircraft attacked on D.R. or on the coast runs from the rearwards, several crews pinpointing on the Haritz See. Aircraft found themselves too late to reach the primary, because of unexpectedly strong winds, and attacked Kiel, while another bombed Sylt. 2 aircraft returned only for technical reasons. None was lost.

Aachen 4 Fk.I Mosquitoes were despatched to Aachen. All attacked the primary, 2 on OBOS and 2 on D.R. All returned safely.

Mine-laying etc. 21 Wellingtons, Stirlings and Lillifoxes were detailed to lay mines in the Bay of Biscay. 20 completed their task, laying 42 mines. One other abandoned its task because of fuel shortage. One Mosquito carried out a met. reconnaissance flight; and 5 U.S. Postresses scattered leaflets over France and Holland.

THE FORECAST

Midnight frontal positions:- (1) cold front 53° N. 19° E. - N. Italy - Spain.

Bases:- Snow showers all night, with clouds falling to 1,000' or below, towering to 15,000'.

Germany:- Similar conditions over the Bay of Biscay as 06-07°E., then heavy convection cloud. Little cloud over 07-12°E. over Germany (including the Rhine). Broken layers of clouds up to 10,000', except in frontal zone.

France:- 8-10, 10ths. cirulus and stratocirulus west of the night. Aachen: 10ths. cirulus and cirulo-nimbus, tops 10-15,000', with a chance of good showers.

France:- Little cloud in N. and S. Heavy convection cloud in N., becoming broken in N.W. Clermont-Ferrand: even chance of less than 5/10ths. tops 10-15,000'. Brest:- 4-8/10ths. cirulus, base 1,000' in showers. Front half-covered; little cloud further S.

RESULTS

		<u>Bombing</u>	<u>Mine-laying</u>	<u>Met. Recce</u>
(a)	No. of aircraft despatched.....	25	21	1
(b)	" " " reporting attack on prim. area....	17	20	1
(c)	" " " " " alt. "	6	0	0
(d)	" " abortive sorties (tech. defect).....	2	1	0
(e)	" " aircraft missing.....	0	0	0
(f)	" " mines laid.....		42	

...../WEATHER EXPERIENCED.

WEATHER EXPERIENCED

6. Basco:- Variable amounts of convection cloud, base below 1,000' over East Anglia. Wintry showers. Good visibility.

Berlin:- 10/10ths. to 15-18,000', with cirrus patches at 23-28,000'

Munich:- 9/10ths. to 6,000'.

W. France:- Variable cloud, 5-7/10ths. at 2,000', with good clear Bright moonlight.

NEELED MARKS

7. One fighter was seen over France, but it made no attack. Moderate inaccurate flak was met from Berlin and Munich, as well as from points on French coast. One Mosquito was hit over Berlin, and one Halifax near St Nazaire.

C. SUMMARY

8. All aircraft returned safely.

RCB/JL.
HC/S. 26342/6/CP34,
23n. April, 1944.

10/11th. APRIL 1944

TARGET	GROUP	AIRCRAFT TYPE	SORTIES	A/C REPORTING ATTACK ON		REPORTIVE SORTIES		MISS-ING	FLAK	DAMAGE TO AIRCRAFT	OTHER CAUSES	DISPOSAL		BOYS TONNAGE
				PRI. AREA	ALT. AREA	OVER B.T.	NOT OVER B.T.					PLACED ON	NOT ATTACHED	
BERLIN	8	Mosq. IV	1	1	-	-	-	-	-	-	-	-	-	1. 40.7
		FFP	2	2	-	-	-	-	-	-	-	-	-	2. 5.4
		M.F.	1	1	-	-	-	-	-	-	-	-	-	-
		Mosq. IX	3	3	-	-	-	-	1	-	-	-	-	-
		Mosq. IV	14	6	6	1	1	-	-	-	-	-	-	-
BERLIN TOTAL			21	13	6	1	1	-	1	-	-	-	-	-
MUNICH	8	Mosq. IX	4	4	-	-	-	-	-	-	-	-	-	1. 1.8
MUNICH TOTAL			25	17	6	1	1	-	1	-	-	-	-	1. 1.9
ST. NAZ.	1	Well. X	4	4	-	-	-	-	-	-	-	-	-	8 mines
		LORIENT	3	3	-	-	-	-	-	-	-	-	-	6 mines
		L. P. LICE	3	3	-	-	1	-	-	-	-	-	1	27 mines
		ST. N. S. LICE	6	6	-	-	-	-	1	-	-	-	-	11 mines
		ST. NAZ. TOTAL			21	20	-	-	1	-	1	-	-	1	42 mines
MET. BORDO	8	Mosq. IV	1	1	-	-	-	-	-	-	-	-	-	
TOTAL			47	38	6	1	2	-	2	-	-	-	1	
LE. PLATS	USJBC	Fortress	5	5	-	-	-	-	-	-	-	-	-	-

PORTRESSES TO:- ALLIES. BOUNTY. C. M. B. REVENUE. ANSWER:

RCB/JL.
C.R.S.3.

BOMBER COMBINED REPORT ON NIGHT OPERATIONS

11/10th FEBRUARY, 1944.

Brunswick, Duisburg, Lachen, Elberfeld, Minelaying, Leaflets, etc.

MEY

Brunswick. 11 Mosquitoes (including one equipped with H2S) were despatched harassing raid against Brunswick. The H2S aircraft released red T.I., and a steady release-point flame. 7 aircraft bombed the T.I. or release-point areas, and 2 others attacked on D.R. The remaining aircraft returned early undercarriage trouble. No aircraft was lost on this night.

Duisburg. 4 OBOE Mk.I Mosquitoes were sent against Vereinigte Stahlwerke at Duisburg/Hamborn. One made a successfully controlled run; the others had OBOE failure, and attacked the primary area on D.R.

Lachen. 4 Mk.I Mosquitoes were detailed to attack Lachen. 3 made successfully controlled runs; the fourth bombed on D.R.

Elberfeld. 8 Mk.II Mosquitoes (4 PENWIPER and 4 FOUNTAIN-PEN) were despatched against the Jaguar ball-bearing works at Elberfeld. One aircraft of each type made successfully controlled run; the rest experienced OBOE failure, and bombed targets in the Ruhr on D.R., 2 attacking Elberfeld town, 3 Essen and one Cologne.

Minelaying. 52 Stirlings, Wellingtons and Halifaxes were sent to lay mines on the French Atlantic and Channel coasts. 45 completed their tasks, laying 453 mines.

Other Operations. Whitleys and U.S. Fortresses scattered leaflets over France and the Low Countries, and Mosquitoes carried out noct. reconnaissance flights and intruder patrols. One Mosquito attacked and damaged a Me.110 near Heppel.

WEATHER FORECAST

Midnight frontal positions:- (1) down from 61° N. 01° E. - Peterhead - Galway. cold from 61° N. 01° E. - Orkney - 55 N. 14° W.

Bases:- Fit most of the night. Smoke troubles N. of the Wash after midnight, and fog S. of the Humber before 0400. Elsewhere, moderate visibility, little cloud.

Germany:- Northern and Central areas will be covered with strato-cumulus, above 1,000' except in snow showers, tops below 12,000'. Cloud in several areas over Eastern and Southern Germany, with occasional snow. Route to Hannover Ruhr: 6-8/10ths cumulus and strato-cumulus, locally 10/10ths., tops 10-12,000' over E. North Sea but lower overland.

France:- Much strato-cumulus in N.E., patches in N.W. Little cloud in S.W., Cherbourg-Le Havre: half covered with strato-cumulus, base 2,000', tops 5-6,000'. Visibility: 5-8/10ths. Remainder of West coast: well broken strato-cumulus, generally less than 5/10ths, but possibly 7/10ths towards Bayonne. Moderate to good visibility everywhere.

RESULTS

	<u>Bombing</u>	<u>Minelaying</u>	<u>Other ops.</u>
(a) No. of aircraft despatched.....	27	52	12
(b) No. of a/c reporting attack on primary area.....	22	45	12
(c) No. of a/c reporting attack on alt. area.....	4	0	0
(d) No. of abortive sorties (tech. defect. 5) (icing..... 3)	1	7	0
(e) No. of aircraft missing.....	0	0	0
(f) No. of mines laid.....		153	

WEATHER EXPERIENCED

9. Bases:- Generally cloudy, base 2-3,000'. Visibility gradually deteriorated, with widespread mist and, towards dawn, fog.

Ruhr-Brunswick:- Mainly 10/10ths cloud in two layers, lower one from 1,500-4,000' and upper from 8-12,000'. Occasional breaks en route. Slight

N. and W. France:- Mainly 3-5/10ths layer cloud, base 2-3,000', tops 5-7,000'. Moderate visibility. Bright moonlight. Severe icing in cloud.

ENEMY DEFENCES

10. 2 fighters were seen over the Bay of Biscay, but neither attempted an interception. A He.110 was attacked and damaged by a Mosquito of 100 Group near Meppel. Slight and inaccurate flak was met from German targets.

CASUALTIES

11. No aircraft was lost. 2 Mosquitoes were damaged by flak over Brunswick and a third (of 100 Group) was involved in a landing accident, due to engine failure.

MLM/PVD.
BC/S. 26342/6/ORS4.
1st W. y. 1941.

TYPE	GROUP	TYPE	BOMBS	TOTAL		OVER		MISS- ING	FLAK	DAMAGED	KILLED	OTHER LOSSES	REPAIRS REQD	NOT REPAIRED	TOTAL MINS
				DOWN	RETR.	DOWN	RETR.								
BRUNSWICK	BUFF	Hoq. IV	1	1	-	-	-	-	2.0	-	-	-	-	-	P. 7.1
	B	Mosq. VII	1	1	-	-	-	-	-	-	-	-	-	-	P. 1.9
	L.F.	Hoq. IV	9	8	-	-	1	-	-	-	-	-	-	-	
BRUNSWICK TOTAL			11	10	-	-	1	-	2.0	-	-	-	-	-	
DUISBURG	B	Hoq. IX	4	4	-	-	-	-	-	-	-	-	-	-	P. 2.9 P. 2.7
COLOGN	B	Hoq. IX	4	4	-	-	-	-	-	-	-	-	-	-	P. 2.7 P. 1.9
KERZEN		Hoq. IX	8	4	4	-	-	-	-	-	-	-	-	-	P. 1.8 P. 1.8 P. 3.6
ROBBER TOTAL			27	22	4	-	1	-	2.0	-	-	-	-	-	
MELNIG	1	Well. X	4	3	-	-	1	-	-	-	-	-	-	-	5 mins
BREIT	6	Hal. IIV	8	8	-	-	-	-	-	-	-	-	-	1	15 mins
ST. N. L. DE	1	Well. X	3	3	-	-	-	-	-	-	-	-	-	-	6 mins
B. YONNE (1)	3	Stir. III	9	8	-	-	1	-	-	-	-	-	-	-	24 mins
B. YONNE (2)	3	Stir. III	3	1	-	-	2	-	-	-	-	-	-	-	3 mins
CIRONNE	3	Stir. III	12	11	-	-	1	-	-	-	-	-	-	1	44 mins
NOELAIN	3	Stir. III	2	2	-	-	-	-	-	-	-	-	-	-	12 mins
CHAMBERG	3	Stir. III	2	-	-	-	2	-	-	-	-	-	-	-	mins
LE HINGE	3	Stir. III	2	2	-	-	-	-	-	-	-	-	-	-	12 mins
ST. HINGE	3	Stir. III	2	2	-	-	-	-	-	-	-	-	-	-	12 mins
LA FAYENCE	4	Hal. IIV	5	5	-	-	-	-	-	-	-	-	-	-	20 mins
NINLAIN TOTAL			52	45	-	-	3	-	-	-	-	-	-	2	153 mins
LE HINGE	91	Whit.	6	5	-	-	1	-	1	-	-	-	-	-	
ST. HINGE	100	Moq. II	5	5	-	-	-	-	-	-	-	1B	-	-	
ST. HINGE	8	Moq. IV	1	1	-	-	-	-	-	-	-	-	-	-	
TOTAL			91	78	4	-	3	-	2.0	-	-	1B	-	-	
W. FRANCE	RELOC	Fortress	5	5	-	-	-	-	-	-	-	-	-	-	

NOT INCLUDED IN TOTAL: PORTRESSES TO:- BRUNSWICK, JINNES, GHEIT, M. COLON, CLEBERON: 91 Group to:- BRUNSWICK, L. V. A. G. B. S. 2.

JUN 17 1944
 COPY NO. 16

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

12/13th. FEBRUARY, 1944.

Antheor Viaduct; Elberfeld; Duisburg; Minelaying; Serrate.

KEY

Antheor Viaduct 11 Lancasters of 617 Squadron attacked the Antheor Viaduct, scoring a number of near misses without damaging the target. No aircraft lost, but one crashed on the way home after landing at an advanced base.

Elberfeld 8 Mk. II Mosquitoes (4 PENWIPER and 4 FOUNTAIN PEN) were despatched against the Jaeger ball-bearing works at Elberfeld. One PENWIPER crashed on OBOE; the rest, for technical reasons, bombed targets in the Ruhr on 2 in the Elberfeld area, 4 at Cologne and one at Aachen. All returned safely.

Duisburg 4 Mk. I Mosquitoes were sent against Vereinigte Stahlwerke at Duisburg/Hamborn. All bombed the primary on OBOE and returned undamaged.

Minelaying Stirlings and Halifaxes laid 109 mines off Cherbourg and the Cotentin. One Halifax was lost.

Serrate 3 Mosquitoes carried out Serrate patrols without making any interceptions.

WEATHER FORECAST

Bases:- Occlusion at midnight from Tynesouth to Scilly, giving strato-cumulus, 1,000-1,500', with light showers or drizzle. Bases in Yorkshire will remain until midnight, other areas until 22-2300. Some airfields in East Anglia, England and Thames Estuary should be available all night.

Continent:- Much strat-cumulus, tops 5-6,000', with thin patchy medium cloud above. Well broken cloud in S.W. and extreme S.E. France, S. of 44°N.; but will be covered to 12,000'. Cloud tops may rise very high over ground in France. Frisians: 5-3/10ths. strato-cumulus, tops not above 6,000'.

RESULTS

	<u>Antheor</u>	<u>Ruhr</u>	<u>Minelaying</u>	<u>Serrate</u>
(a) No. of aircraft despatched.....	11	12	25	3
(b) " " " reporting attack on primary area.....	11	7	23	3
(c) " " " " " alternative area. 0 ... 5 ... 0 ... 0	0	5	0	0
(d) " " abortive sorties (tech. defect).....	0	0	0	1
(e) " " aircraft missing.....	0	0	1	0
(f) " " mines laid.....			109	

WEATHER EXPERIENCED

Bases:- A narrow belt of cloud, based at 1,000' with patches below, slowly westwards over East Anglia during the night, reaching a line Hull-Don by dawn. Behind it, there was much strato-cumulus at 2,000'. Before it, rain and fog became widespread, although many airfields in the S.W. and much of the E. coast remained fit.

Antheor:- Fine. Little cloud. Good visibility. Wind: 020°/60-70 m.p.h.

Ruhr:- No cloud. Good visibility.

...../Frisians.

Frisians:- 7-8/10ths. strato-cumulus, tops 8,000'. Slight haze in cloud. Bumpy.

Cherbourg:- 5/10ths. strato-cumulus, tops 5,000'. Good visibility.

NARRATIVE OF ATTACK (Antheor)

9. The leader was dazzled by searchlights and harassed by the target guns, and finally dropped his red spot fires on the beach. He could not identify the viaduct visually, but estimated its position in relation to the coastline, and instructed his force to overshoot the markers by about 300 yards. Later crews identified the target by flarelight, and saw their bombs explode in the immediate vicinity.

DAY RECONNAISSANCE (Antheor)

10. Photographs taken the day after the attack showed many new craters around the viaduct, including one particularly near miss. The target itself, however, was apparently intact.

ENEMY DEFENCES

11. Accurate flak was met at Antheor. Little opposition was encountered by the Mosquitoes and minelayers. One fighter was seen off the Frisians.

CASUALTIES

12. One Halifax failed to return from the Frisians. There is no information to show where or how it was lost. A Lancaster of 617 Squadron crashed while proceeding homewards from an advanced base, with the loss of all but one of the crew. 2 other Lancasters were badly damaged by flak over Antheor, and one had to land in Sardinia.

HM/JT.
BC/S. 26342/6/CRS4.,
7th. April, 1944.

TARGET	GP.	ALPHAGOV TYPE	SIGHTED	L/C REPORTING CENTER CL.		ADDITIONAL SIGHTING		MIS- ING.	ATTACK				TONE				
				WIL. AREA	INT. AREA	OVER S.T.	NOT OVER S.T.		FLAK	FIGHTER	MISC. IN FLIGHT	OTHER CAUSES	ATTACK- ED	NOT ATTACK- ED	W.E.	T.E.	
ANTWERP VLISSCH	5	Long.I	11	11	-	-	-	-	2 AC	-	-	-	-	-	-	43.8 (8x12000 lb)	1.5
KIMBERFIELD	8	Long.IX	8	3	5	-	-	-	-	-	-	-	-	-	-	2.7	-
DUISBURG	8	Long.IX	4	4	-	-	-	-	-	-	-	-	-	-	-	3.6	-
BOMBING TOTAL			23	18	5	-	-	-	2 AC	-	-	-	-	-	-	-	-
MINELAYING WILDLANS	3	Star.III	11	11	-	-	-	-	-	-	-	-	-	-	-	65 Mines	
	4	Hnl.II & V	6	6	-	-	-	-	-	-	-	-	-	-	1	24 Mines	
	6	Hnl.II & V	6	4	-	-	1	1	-	-	-	-	-	-	-	8 Mines	
CHERBOURG	3	Star.III	2	2	-	-	-	-	-	-	-	-	-	-	-	12 Mines	
MINELAYING TOTAL			25	23	-	-	1	1	-	-	-	-	-	-	1	109 mines	
SURFACE	100	Long.II	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL			51	44	5	-	1	1	2 AC	-	-	-	-	-	1		

B.C.D./I.S.S.
D.E.S.S.

10 MAY 1944

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

15/16th FEBRUARY 1944

BERLIN : Frankfurt-on-Oder : Aachen : Enemy Airfields : Minelaying :
Serrate

391 aircraft, the largest force yet sent against the German capital, were
used on the last but one of the 16 great winter raids. Over 2,500 tons were
dropped in a concentrated sky-marking attack, delivered through thick cloud. Re-
connaissance photographs, obtained a few days later, showed that over 200 industrial
and commercial premises, including 16 factories of priority 1 or 1-, had been
damaged in the 9 raids carried out since 23rd December. Fighters were active on
the night, although they left the defence of the capital to the ground defences, and
4 aircraft (4.7.) were lost.

24 Lancasters carried out a diversionary attack on the marshalling yards at
Frankfurt-on-Oder, beyond Berlin, while Mosquitoes bombed Aachen and airfields in
the Low Countries. Mines were laid in Kiel Harbour and the Bay of Biscay; and
Stukas carried out intruder patrols, destroying one enemy aircraft and damaging
others. All the bombers and minelayers returned safely, but one intruder was lost.

FORECAST

Midnight frontal positions:- Warm front 54N. 07E. - 50N. 05E. - N. Italy.
Bases:- 3-10/10ths strato-cumulus, base 2,000', visibility 2 miles or more.
Smoke troubles in Yorkshire and East Anglia. Later in night, visibility will
fall to an average of 1 mile.
Germany:- 10/10ths low stratus (well below 1,000' in snow and sleet) and
strato-cumulus in warm front sector over W. Germany and Low Countries. E. of 09°E.:
10/10ths strato-cumulus, base above 1,000', with little or no cloud above 4,000'.
France:- Much strato-cumulus, except in S.W.
Winds at 20,000':- 120°/30 m.p.h. at Berlin. 40 m.p.h. or less everywhere
else.

DETAILS

RAID ATTACK

Route: (See map of Raid tracks.)

Route Marking Y-aircraft were to drop green steady flares on the mainland
N.W. of Romo Island on the way out, and on the E. tip of Falster Island on
the way back.

Method of Attack Primary blind markers were to mark the aiming point with
T.I. and release-point flares (red/green stars). If their H2S was unworkable,
they were to hold their markers and act as supporters. Blind backers-up were to keep
the aiming-point marked throughout the raid with green T.I. and release-point flares;
if their H2S was useless, they were to act as visual backers-up, retaining their flares.
Blind backers-up were to aim greens at the centre of reds (later in the attack at the
centre of greens) with no overshoot. But if no T.I. could be seen for cloud, they
were to hold their markers and either bomb blindly or aim at the release-point flares
on a heading of 165°M. Supporters were to bomb blindly if possible, otherwise on
a heading of 165°M. Identification after a good D.R. or at the centre of all T.I. or release-point
flares (heading 165°M.) if any had been dropped. 30 Lancasters were to join the
main force, aiming at any T.I. visible, or bombing blindly or on a good D.R. Main
force aircraft were to aim at the centre of greens or, if the cloud was thick, at the
centre of release-point flares as detailed above.

7. Timing Zero hour: 2115 Duration of Attack: 2113-2135
- Primary blind markers: 3 Lincs. } at zero - 2
 6 Hals. }
- Special blind backers-up: 11 Lincs. from zero to zero + 13 (one per 2 mins but 2 at zero).
- Blind backers-up: 3 Lincs. } from zero + 1 to zero + 19 (in pairs
 11 Hals. } every 2 mins. but one at zero + 7, and +13)
- Visual backers-up: 20 Lincs. from zero to zero + 19 (one per min.)
- Supporters: 53 Lincs. } at zero - 2
 3 Hals. } at zero + 4
- Main Force: 144 a/c from zero to zero + 4 } each wave to
 134 a/c from zero + 4 to zero + 9 } include both
 142 a/c from zero + 9 to zero + 12 } Hals and Lincs
 142 a/c from zero + 12 to zero + 16)
 142 a/c from zero + 16 to zero + 20)
 22 A.R.C. aircraft throughout the attack.

8. Marker Loads

- Primary blind markers: 1x4 flares (n/g stars) + 4 red T.I. (2 LB)
- Special blind backers-up: 2x4 " " + 3 green T.I. (4 LB)
- Blind backers-up: 1x4 " " + 4 green T.I. (2 LB)

All blind aircraft were also to carry one green steady flare internally.

9. Divebombers, etc. 2 Y-Mosquitoes were to drop spoof route-markers over Funnar See, and mark the aiming-point with yellow T.I. at zero-5. 11 Mosquito were to bomb these T.I.; 3 were also to drop spoof fighter flares N.E. and 3 S.E. of the target. The 2 Y-Mosquitoes were to drop more spoof route-markers at 5° 10'40"E, backed up by 2 other Mosquitoes. From these route-markers, 3 more Mos were to drop spoof fighter flares. At zero hour, 24 V.F.F. Lancasters were to put a diversionary attack on the marshalling yards at Frankfurt-on-Oder, dropping red and green T.I. with their H.I. 6 Mosquitoes were to attack Berlin between 45 and zero+120, aiming at the centre of fire.

10. WINDOW WINDOW was to be dropped at the rate of 2 bundles per minute 50 miles of the target in both directions; and at one bundle per minute for the rest of the trip. All Mosquitoes were to drop WINDOW at the rate of 3 bundles per minute from a point 3 miles from the target, until their supplies were exhausted.

SORTIES

11. (a) No. of aircraft despatched 591
 (b) No. of aircraft reporting attack on primary area 761 (95.2%)
 (c) No. of aircraft reporting attack on alternative area . 13 (1.9%)
 (d) No. of abortive sorties { tech. defect or manip. }
 { error 63 } .. 75 (3.4%)
 { crew failure 7 }
 (e) No. of aircraft missing 42 (4.7%)

WEATHER EXPERIENCED

12. Bases:- Much strato-cumulus at 2-3,000' in northern Group; little C. S. Moderate visibility (poor in 3 Group and N. and W. Yorkshire). Light rain drizzle spread from the W. Visibility improved gradually.

Route:- Little cloud over English coast. 1/10ths over North Sea, 1/5-6,000'. At 69°-30'N, a feeble front was encountered, giving 1/10ths strato-cumulus to 2-1,000', with cirrus above at 2,000'. 1/10ths for rest of route, base tops 6-8,000'.

Target:- 10/10ths., base 600-1,000', tops 6-3,000'. Nil above. Good visibility. No moon.

Winds at 20,000':- 350°/10 m.p.h. at bases, gradually veering and increasing to 2/35 m.p.h. at target. Same for return, except that wind velocity remained constant at 35 m.p.h.

PHOTOGRAPHIC STATISTICS

No ground detail photographs were returned. All showed 10/10ths thick cloud.

NATURE OF ATTACK

The primary blind markers opened rather early, the first markers going down at zero-4. 9 others, as well as 3 blind backers-up, marked the target before zero. Timing of the supporters was admirable, 19 bombing by zero-1. No T.I. could be seen through the cloud, and the attack developed into a pure sky-marker, with one flare from zero-12 to zero-14 during which no flares were burning. H2S crews who had the positions of fires on their sets thought that the bombing was at first directed in the W. of the city, but that later it spread towards the centre. Reports over the capital an hour after the attack had finished reported large areas of fire and a column of smoke rising to 20,000'.

ADMISSIONS

The German wireless issued the following statement: "British aircraft made a terror raid on the Reich capital. From a cloud-covered sky, a large number of H.E. and I.B. were dropped on various quarters of the town. These caused damage to residential districts, to cultural monuments and hospitals. In spite of unfavorable conditions for the defences, Air Defence Forces have destroyed 43 terror bombs."

RECONNAISSANCE

Ground detail photographs of Berlin were obtained in daylight on 19th January, for the first time for 2 months. Since the last reconnaissance, major raids had been delivered on the nights of 23/24 and 29/30 December, 1/2, 2/3, 7/23, 28/29 and 30/31 January, and 1/2 and 15/16 February, as well as various harassing attacks by Mosquitoes. In the absence of night photographic reconnaissance, it cannot be stated with certainty how much of the damage was caused by any particular raid.

The fresh damage characteristically consisted of numerous small incidents scattered over a very wide area. Nowhere had fires raged unchecked over whole districts, as so many other German towns, but this was partly due to the fact that considerable areas had already been so devastated as to form artificial fire barriers. Altogether, a further 400 acres of built-up property in Berlin had been newly laid waste. Districts most affected were Spandau in the N.W., Charlottenburg and Wilmersdorf in the W., the central area S. of the Tiergarten, and the neighbourhood of the Tempelhof airfield in the S.E. But none of the city escaped completely, apart from the northern districts. Very many industrial premises were hit, especially on the eastern and western outskirts. The most important of these, and the most severely damaged, was the huge plant of Siemens and Halske A.G. at Siemensstadt, manufacturing electrical apparatus, several buildings of which were gutted, including the switchgear and dynamo workshops. 4 other factories of priority 1+, 11 of priority 1, 11 of priority 2, 8 of priority 3 and 103 ungraded industries were also damaged, together with 33 commercial premises, 2 priority 1 power-stations, 4 priority 2 gasworks, tramways and various public utilities, including 5 tramway depots, the Berlin Hauptbahnhof, 29 gutted camps and the G.I.T. Research Station adjoining the Tempelhof airfield. Full details of this damage are set out in Interpretation Report No. K.1377.

DAMAGE ASSESSMENT

The Ministry of Home Security (Research and Experiments Department) estimates that 14% of the bombs reported over the target in all the raids covered by the damage report, fell in that part of the area containing administrative buildings.

/A much higher proportion

A much higher proportion fell within the whole administrative area of the city. About 4% of all buildings were seriously damaged, including the same proportion of industrial buildings. The industrial effects represented the loss of the labor of 739,000 workers for one month. Damage to the Siemens factories at Siemensstadt exceeded 2,000,000 square feet, which surpasses that inflicted on any other factory complex except Krupps at Essen. 3-6,000 people are estimated to have lost their lives in these attacks, and the same number to have suffered serious injury.

ALTERNATIVE TARGETS

19. 13 aircraft attacked alternative targets in the areas of Sylt (5), Terschell (2), Hannover, Stryna, Augustanborg, Mittenwalde, Rostock, Fohler Island, Velje and Potsdam.

ENEMY DEFENCES

20. Ground Defences The heavy guns of Berlin fired a moderate to intense barrage over a wide area at heights between 16,000' and 25,000', paying special attention to the sky-marker flares. The cloud was too thick for searchlights even to illumine its base for fighters, let alone penetrate it. Light flak and rocket projectiles were also reported. 2 aircraft were lost to the target guns. Accurate heavy flak was met at many points en route, especially over Denmark on the way out and Texel on the way home. 12 more aircraft were shot down from the ground en route, 8 of them before reaching the target.

21. Fighters The German defence controllers left the protection of the target to the flak guns, and directed all their efforts towards intercepting the bombers on their way in and out. They plotted the stream from the time it was 60 miles N.W. of Harwich through the medium of two long-range reporting stations, with the assistance of shipping in the N. Baltic. 17 combats and 9 losses occurred between Jutland and the German Baltic coast, and 8 combats and 2 losses between the coast and Neu Ruppen. Fighters were warned to avoid the target area on account of flak, but 14 combats took place over the capital. No losses were, however, observed here. 3 combats and one loss were seen just S.W. of Berlin on the first leg of the homeward journey; thereafter, our aircraft were little troubled by free-lance fighters which appear to have achieved no further success. Benito fighters, however, destroyed at least 5 bombers over Holland and the Frisians; a total of at least 17 aircraft shot down in combat. The diversion on Frankfurt-on-Oder had little effect, since the controllers were not interested in identifying the objective of the bombers. 2 Lancasters each destroyed a Ju.38, and a Mosquito of 100 Group shot down an He.111.

CASUALTIES

22.	No. of aircraft missing	42 (4)
	(flak	38)
	No. of aircraft damaged (fighter	11)
	(non-enemy action	20)
	.....	69

14 losses to flak were observed, and 17 to fighters. 5 Halifaxes and 2 Lancasters were destroyed in landing accidents.

FRANKFURT-ON-ODER

23. 24 P.T.F. Lancasters attacked the marshalling yards at Frankfurt-on-Oder as a diversion to the main effort. The bombing opened on time, and a fair to good concentration was maintained, although the early T.I. were spread over a distance of 5-10 miles from N.W. to S.W. All aircraft attacked by H2S, or on T.I. Slight opposition was encountered, with a few ineffective searchlights. No fighters were seen. All the aircraft returned safely.

AACHEN

24. 2 Mk.I Mosquitoes were sent to Aachen. One made a successfully controlled run, the other bombing on R.R. Both returned undamaged.

/ENEMY AIRFIELDS

ENEMY AIRFIELDS

11 Mk.I Mosquitoes were despatched against the airfields at Venlo, Twente and Rijssen. All made successfully controlled runs, except one aircraft destroyed for Twente, which attacked the Bentheim area on D.R. At the same time, 11 PENNIPER aircraft went to Deelen, where 2 attacked on OBOE, the rest completing their task, and 2 Mk.I and 2 PENNIPERS visited Leeuwarden, all making successfully controlled runs except one PENNIPER which bombed the primary on D.R. No position was met, apart from a few bursts of heavy flak at Leeuwarden; and all aircraft returned undamaged.

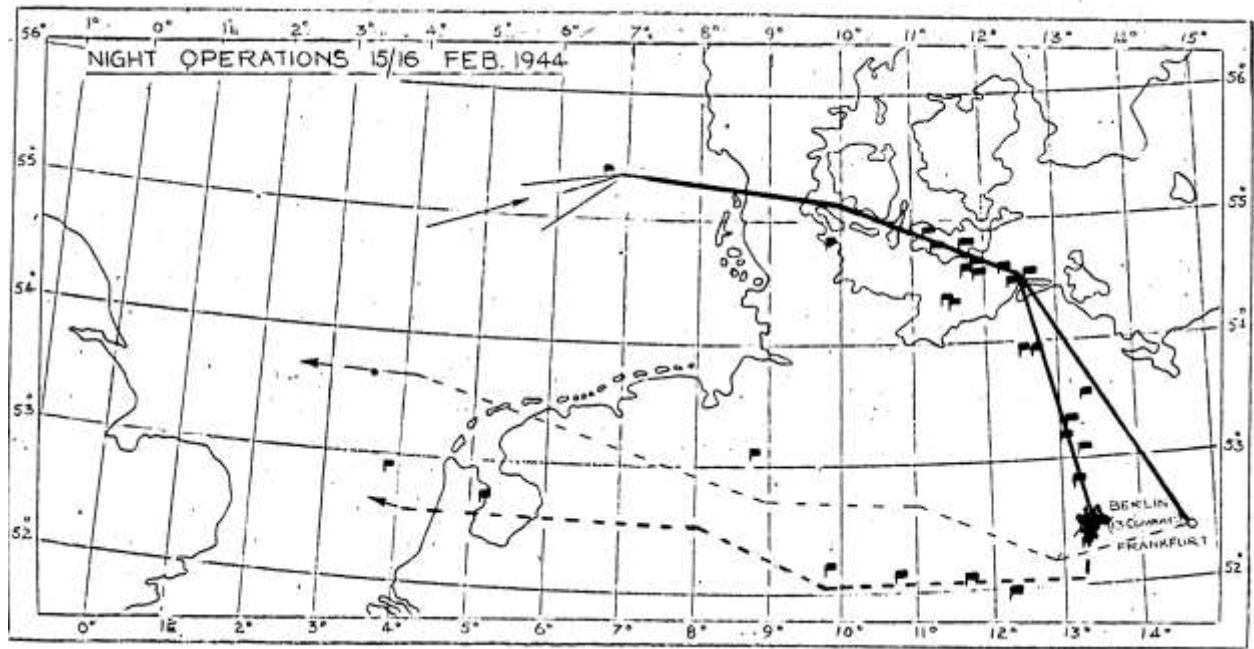
MINELAYING

4 P.F.F. Halifaxes and 45 Stirlings were sent to lay mines in Kiel Harbour. Halifaxes dropped red T.I. and flares N. of Schleimünde, from which 39 Stirlings made timed runs to the primary area. 125 mines were laid. 2 Stirlings were attacked by fighters, but both escaped without damage. 6 Stirlings laid 13 mines off Baysung, and out of a force of 6 Wellingtons dropped 10 mines off Lorient. All aircraft returned undamaged.

SEARCHING

14 Mosquitoes of 100 Group and 6 of 100 G.P. were sent on intruder patrols along the route of the Berlin force, and against enemy airfields. 2 aircraft of 100 Group claimed to have destroyed an He.177 and damaged a Ju.88 respectively. 1 Mosquito was lost without trace.

2652/5/0134
17. 1944



BOMB PLOT NOT AVAILABLE

17 MAY 1944

BOMBER COMMAND REPORT ON NIGHT OPERATIONS19/20th FEBRUARY, 1944.

408

LEIPZIG : Berlin : Aachen : Dutch airfields : Minelaying : Serrate etc.

RY

223 aircraft were sent to Leipzig. The target was covered with 10/10ths cloud the sky marker flares were at first well concentrated and the attack opened gradually. Later the marking became more scattered and the bombing spread over the area. Damage was caused to a number of important industries. A minelaying operation at Kiel was planned to divert the fighters, but the latter were distracted by Mosquitoes attacking Dutch airfields, and by an unlucky chance met the bomber soon after it had crossed the enemy coast. 78 bombers (9.5%) were lost.

175 mines were laid in Kiel harbour. As well as the attacks on Dutch airfields, Mosquitoes carried out a diversionary raid on Berlin, and precision attacks against Aachen and military targets in Northern France. Other Mosquitoes, including some from A.D.G.B., patrolled airfields in Germany, shooting down 2 enemy fighters without loss. One Mosquito did not return from Berlin.

WEATHER FORECAST

Bases:- 10/10ths strato-cumulus all night, tops 6,000', base 2-3,000'.
 15.0ml areas should remain fit, in spite of occasional deteriorations with rain. East Anglia will be badly affected between dusk and midnight. Moderate falling.

Germany:- A new type of air has appeared over E. and Central Germany, giving some clearances in the strato-cumulus. Clear sky at Berlin. 10/10ths at Leipzig although here too the cloud may clear to nil. Route: as for bases, except good breaks or clearances should be found E. of 52°N. and S. of the coast. A low belt of snow with thick strato-cumulus from 1,000' to 3,000' will lie at right angles from S. Norway to Spain head to Dijon. W. of this belt, there will be strato-cumulus, with high icing index.

LEIPZIG.ROUTE OF ATTACK

Route. (out) 54 00'N. 04 40'E - 52 40'N. 08 10'E - 52 37'N. 11 52'E - LEIPZIG.

(back) Aircraft bombing before zero + 8: 50 50'N. 12 00'E - 50 20'N. 12 00'E - 52 15'N. 05 10'E.

Aircraft bombing after zero + 8: 51 00'N. 12 00'E - 52 40'N. 05 15'E. 04 00'E.

Route-marking. On the way out, red steady flares were to be dropped at 54 00'N. 07 00'E (17 miles S.E. of Groningen), and at 52 37'N. 11 52'E (7 miles N. of Stendal), by blind markers and blind backers-up. On the way home, aircraft taking the southern route were to take a running fix by means of the 19k.XIV light on the T.I. dropped at Aachen by Mosquitoes. Aircraft on the northerly route were to navigate by red steady flares dropped by late blind backers-up at 54 00'N. 08 20'E (20 miles N.E. of Osnabruck).

Method of Attack. Primary blind markers were to mark the aiming-point and T.I. and release-point flares (green/red stars); if their H2S was available, they were to hold their markers and act as supporters. Blind backers-up were to keep the aiming point marked throughout the raid with greens and release-point flares; if their H2S was useless, they were to act as visual backers-up, holding their flares. Visual backers-up were to aim greens at the

/centre of all visible.....

centre of all visible T.I., with no overshoot; but if the cloud was thick, they were to retain their T.I. and bomb blindly or aim at release-point flares on a heading of 200°. Supporters were to bomb on H2S, if possible, otherwise visually or on a good D.R. If T.I. had already been dropped, they were to aim at the centre of them, or at flares as detailed above. 30 Lancasters of 10 were also to act as supporters, aiming at any T.I. visible, or bombing on H2S on a good D.R. Main force aircraft were to aim at the centre of all greens the centre of release-point flares as detailed above. They were not to attack before zero.

7. Timing Zero hour: 0400 Duration of attack: 0358-0419.
- Primary blind markers. 30 a/c at zero - 2
 - Blind backers-up. 14 a/c from zero + 1 to zero + 18 (one per min. but 2 at zero + 3, and none at zero + 2, +12, +16 or +17).
 - Special blind backers-up. 11 a/c from zero to zero +16 (one every 2 mins 2 at zero and one at zero +17).
 - Visual backers-up. 25 a/c from zero to zero + 18 (one per min. but 2 at zero and 2 at zero +1, +5, +9 and +13).
 - Supporters: 55 a/c at zero - 2.
 3 a/c at zero +10.
 - Main Force: 138 Lancs. from zero to zero +4
 137 Lancs. from zero + 4 to zero + 8
 78 Lancs. from zero + 8 to zero + 11
 130 Hls. from zero + 10 to zero + 14
 132 Hls. from zero + 13 to zero + 17
 77 Lancs. from zero + 16 to zero + 19.
 18 A.B.C. aircraft spread throughout the attack.

8. Marker Loads
- Primary blind markers. 1x4 flares (G/R stars) + 4 red T.I. (2 LB)
 - Blind backers-up 1x4 " " " + 4 green T.I. (2 LB)
 - Special blind backersup 2x4 " " " + 8 green T.I. (4 LB)
 - Visual backers-up 4 green T.I. (2 LB)

9. WINDOW. WINDOW was to be dropped at the rate of 2 bundles per minute with 50 miles of the target (in both directions) and one bundle per minute for the rest of the journey. All Mosquitoes were to drop WINDOW at maximum rate.

10. Diversion. 2 Mosquitoes were to drop yellow T.I. on Stendal, if this was in order. Otherwise they were to drop them with reds and H.E. on Berlin at zero - 22. 13 Mosquitoes were to drop spoof fighter flares near Minden and N.W. of Berlin; and green T.I. and H.E. on Berlin at zero - 20, -18 and -17. Mosquitoes were to drop WINDOW at the maximum rate over the last 30 miles to Leipzig, and then bomb the target at zero - 4, either visually or on D.R.

SORTIES

11. (a) No. of aircraft despatched
- (b) No. of aircraft reporting attack on primary area.....
- (c) " " " " " " " " alternative area.....
- (d) " " abortive sorties.....
- (e) " " aircraft missing.....

WEATHER EXPERIENCED

12. Bases:- Broken strato-cumulus, base 2-3,000', tops 5,000'. Variable ice generally low to moderate. Moderate visibility.

Route and target:- 10/10ths stratocumulus, tops 5-6,000'. Some breaks over Dutch coast. Slight haze at target. Fair visibility. Quarter moon, rising at zero +9C.

Winds:- 10-15,000' (North Sea) : 060-070°/20-25 m.p.h.
 10-22,000' (continent) : 050-060°/25-30 m.p.h.
 25,000' (") : 040°/25-30 m.p.h.

PHOTOGRAPHIC STATISTICS

All photographs showed 10/10ths thick clouds.

NATURE OF ATTACK

The attack opened early, the first primary blind marker releasing T.I. before zero. 12 others reached the target with H2S in order before zero. 11 back-up droppers dropped WANGUNGE flares, beginning at zero. The timing of the markers was in general good, but the supporters straggled from zero - 5 to zero. The attack, mostly aimed at the skymarkers, was at first concentrated; after zero + 8 the marking became less plentiful, and the bombing began to scatter. No flares were burning between zero + 11 and zero + 15.

RECONNAISSANCE

18 American Fortresses attacked aircraft factories in Leipzig with great accuracy on the following day; and much of the damage revealed in photographs a later in the week must be attributed to this cause. 5 of the 10 most important factories in Leipzig suffered severe damage: the Erla aircraft plant at Heiterblick and Mochau, the A.T.A.S. assembly plant at Mochau, the Airplane Transport Anlagen G.m.b.H. at Grosszocher and the Meier und Bolt (tools and abrasives) works in the same district (all priority 1). At least 30 other war factories were hit. The western part of the city was most seriously affected, especially the industrial area E. of the Plagwitz station, where the largest wool-spinning factory and dyeworks in Europe (Kammgarnspinnerei & Co.) was three-quarters destroyed by fire. Business and residential areas escaped lightly, by comparison with industries, the only concentration of damage occurring in the district W. of the World Fair.

MARKING EQUIPMENT

H2S.

	Pk.	Droppers	ATTACKED		Missing	Bombed Blindly	No. which dropped	
			H2S O.K.	H2S w/s			R/P flares	T.I.'s.
Primary blind markers	II	25	19	7	2	3	16	13
	III	2	1	1	-	1	-	-
Secondary blind markers	II	13	5	2	3	4	4	5
	III	11	6	4	1	6	6	7
Flares	II	285	162	53	32	31	-	-

GROUND DEFENCES

Ground Defences. The first arrivals met slight unseen fire from the heavy anti-aircraft, which soon put up a barrage to 23,000'. After a quarter of an hour, the barrage was lowered to 18,000'. The light guns aimed at the skymarker flares. Searchlights could not penetrate the cloud, but illuminated its base for the bombers. Active opposition was met on the way out at Emden, Bremen, Hannover, Frankfurt and Rotterdam. 20 aircraft were seen shot down from the ground: 5 over the Dutch coast and Lastrup, 7 between Lastrup and Brandenburg, 5 over Leipzig and 3 on the way home.

Fighters. Night fighters were assembled in the Hamburg area in wait for intruders moving towards the Danish coast; but the attacks on the airfields in Holland possibly deterred the fighter controllers from diverting their whole force. As a result, the fighters were unfortunately present in the Hamburg/Poland area when the main bomber force crossed the Dutch coast; and, being drawn southwards from there, quickly made contact with the bomber stream. Between the coast and the target, 20 bombers were seen to go down in combat; 3 more were destroyed over the target, and 4 on the return route. The temporary diversion of the fighters' fuel, so that they pursued the bombers home with less than their usual persistency. Altogether, as many as 155 interceptions were

reported, including 58 attacks. 5 fighters were shot down: a Ju.88, a He.111 and a Dr.217 by Lancasters, a FW,190 by a Stirling and another Ju.88 by a Halifax

CASUALTIES

19.	No. of aircraft missing.....	78 (9.5%)
	" " " damaged (flak.....12)	
	(fighter.....16)	49
	(non-enemy action.....21)	

The losses on this night were large. The fighters met the bomber stream unluckily early, after the attacks on Dutch airfields had deterred the fighter controllers from sending their aircraft after the diversionary minelayers. Moreover the winds were not as forecast, so that many aircraft reached turning points in the route too early and had to orbit which increased the risk of collisions; and the concentration of the bomber stream naturally suffered. 27 bombers were seen destroyed by fighters, 20 by flak and 4 in collisions. Most of the remaining losses were probably due to fighters, which appear to have enjoyed an extraordinary measure of success. 2 Lancasters of 103 Squadron collided while approaching to land; and one Halifax was destroyed in a landing accident.

BERLIN

21. 15 Mosquitoes were despatched on a diversionary raid to Berlin, as laid down in paragraph 10. 14 completed their task. The other was lost without trace.

AACHEN

22. 3 OBOE Mosquitoes (2 Mk.I and one Mk.II FOUNTAIN PEN) were sent on a precision test against Aachen. All made successfully controlled runs, and returned undamaged.

DUTCH AIRFIELDS.

23. 10 Mk.I Mosquitoes were sent to attack enemy airfields at Venlo, Leeuwarden, Twente and Gilze Rijen. At the same time, 3 PENWIPER aircraft were sent to Deelen, and 3 to Volkel. All made successfully controlled runs, except one Mk.I aircraft on Twente and one PENWIPER on Volkel, which abandoned their task because of OBOE failure. None of the targets was defended, and all aircraft returned undamaged.

SOTTEVAST : HERBOUVILLE.

24. 2 Mk.II FOUNTAIN PEN Mosquitoes were sent to attack the military construction at Sottevast, and one against that at Herbouville. All experienced OBOE failure and bombed on D.R. All returned safely.

MINSLANDING

25. 4 P.P.F. Halifaxes and 45 Stirlings were detailed to lay mines in Kiel Harbour, and divert the fighters from the main bomber force. 47 reached their target, laying 175 mines. The bay was covered with 10/10ths cloud, but the Halifaxes dropped green T.I. and steady flares at 54 46'N. 09 56'E., from which the Stirlings were able to make timed runs to the target. 2 aircraft had to abandon their task for technical reasons, and dropped their mines W. of Amrum and W. of Sylt respectively. All returned safely.

FIGHTER SWEEPS

26. 12 Mosquitoes of 100 Group were despatched on offensive sweeps over enemy territory. 8 completed their missions, without making any interceptions. At the same time, 17 Mosquitoes of A.D.G.B. patrolled aerodromes in N.W. Germany, destroying one enemy aircraft at Hendorf and another at Florennes. Our aircraft sustained no casualties.

/Met. Recco.....

- 5 -

MET. RECOE

2 Mosquitoes carried out met. reconnaissance flights without incident.

D.
6342/2/ORS4.
April, 1944.

TARGET	GP.	AIRCRAFT TYPE	COMPIRES	A/C REPORTING		ABORTIVE		MIS-ING.	DAMAGE				INTERCEPTIONS		DCB TONNAGE	
				ATTACKED AREA	ON AREA	ON E.V.	ON OVER E.V.		FLY.	FIGHTER	MISC. IN FLIGHT	OTHER CAUSES	ATTACKED	NOT ATTACKED	H.E.	INC.
LEIPZIG	B	Hal. III	14	7	1	-	2	4	1	-	-	-	-	-	-	1202.5 1352.7 Heavy Bombs. 2-8000 lb 169x4000 lb
	HP	Lang. III	64	57	1	-	2	4	1	1 AC	-	1+1 AC	3	4	-	
	B	Hal. II	3	3	-	-	-	-	-	-	-	-	-	-	-	
	HP	Moog. IV	7	7	-	-	-	-	-	-	-	-	-	-	-	
	HP	Lang. III	25	20	1	2	-	2	-	-	-	-	-	-	-	
	1	Lang. I	1	-	-	-	-	-	-	-	-	-	-	-	-	
	1	Lang. III	25	25	1	-	-	3	-	-	-	-	2	-	-	
	1	Lang. I	12	37	-	-	-	4	-	-	-	-	4	5	-	
	HP	Lang. III	25	25	2-1*	-	-	9	3	1B + 1AC	2*	1 AC	3	6	-	
	2	Lang. I	12	6	-	-	-	1	-	-	-	-	1	4	-	
	1	Lang. III	11	11	-	-	-	1	-	-	-	-	-	2	-	
	1	Lang. II	36	30	-	-	-	3	-	-	-	2-1AC	5	3	-	
	4	Hal. II & V	50	56	1	1	4	8	3	1+1AC+1AC*	1	-	7	8	-	
	1	Hal. III	20	66	1	-	14	2	2	1B	2	1B+1E	2	5	-	
5	Lang. I	60	52	1	-	3	4	-	-	-	1 AC	1	6	-		
1	Lang. III	18	12	4	4	9	8	-	1 + 1AC	-	3 AC	8	25	-		
6	Hal. II & V	64	69	4	4	11	11	2	2 AC	-	-	11	30	-		
1	Hal. III	34	24	4	1	3	2	1	-	-	1-1AC	3	7	-		
1	Lang. II	11	25	-	-	3	5	-	1 AC*	-	-	1	2	-		
LEIPZIG TOTAL			623	600	25*	9	61	70	12	4+10AC+2B	5+2E	4+8AC+1B+1E	50	97		
BERLIN	B	Moog. IX	3	3	-	-	-	-	-	-	-	-	-	-	H.E.	INC.
HP	Moog. XVI	1	1	-	-	-	-	-	-	-	-	-	-	-	3.5	1.7
	Moog. IX	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-
	Moog. IV	9	8	-	-	-	-	4	-	-	-	-	-	-	-	-
BERLIN TOTAL			15	14	-	-	-	4	-	-	-	-	-	-	-	-
MACHEN	B	Moog. IX	2	2	-	-	-	-	-	-	-	-	-	-	2.0	0.3
HP	Moog. IV	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-
MACHEN TOTAL			3	3	-	-	1	-	-	-	-	-	-	-	-	-

* Also attached primary.

* Also damaged by Flak.

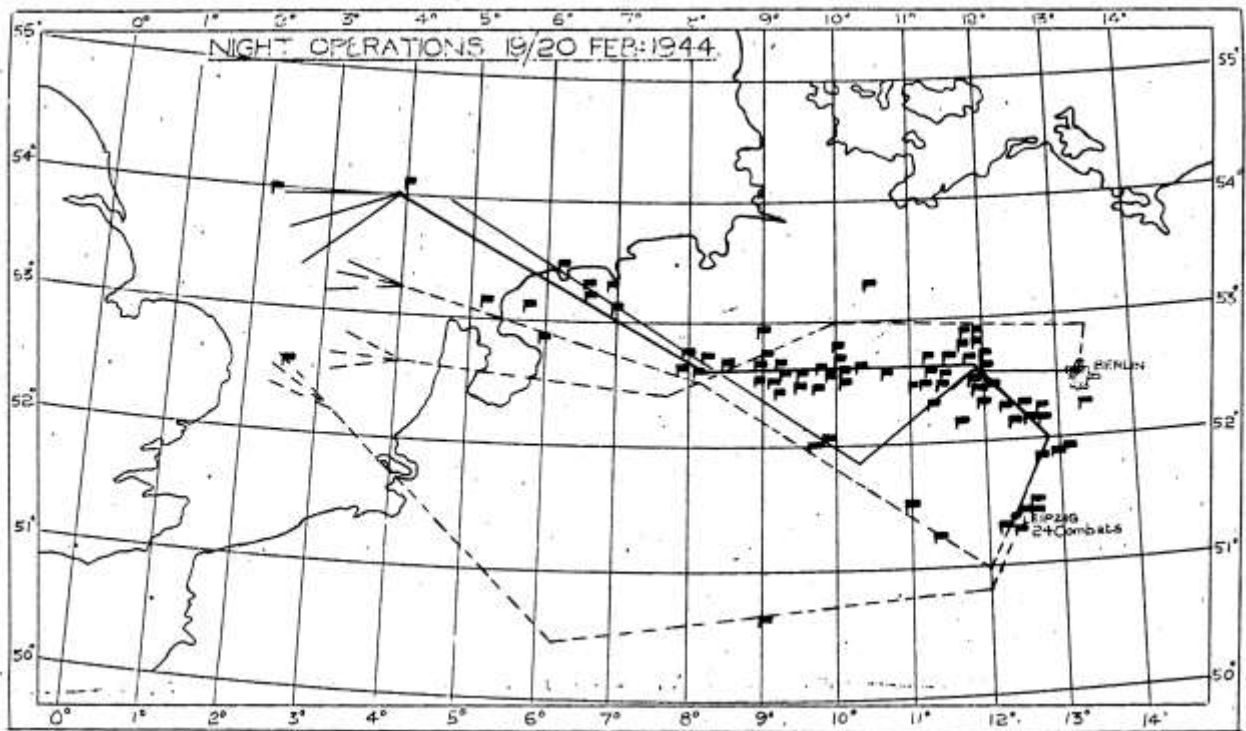
.../minutes.

TARGET	GP.	AIRCRAFT TYPE	COMPIRES	A/C REPORTING		ABORTIVE		MIS-ING.	DAMAGE				INTERCEPTIONS		DCB TONNAGE	
				ATTACKED AREA	ON AREA	ON E.V.	ON OVER E.V.		FLY.	FIGHTER	MISC. IN FLIGHT	OTHER CAUSES	ATTACKED	NOT ATTACKED	H.E.	INC.
BERLIN	B	Moog. IX	3	3	-	-	-	-	-	-	-	-	-	-	2.7	-
GLIEM-GLEIM	B	Moog. IX	2	2	-	-	-	-	-	-	-	-	-	-	0.9	-
VOLKEL	B	Moog. IX	3	2	1	-	-	-	-	-	-	-	-	-	1.8	-
LEGNARDEN	B	Moog. IX	3	3	-	-	-	-	-	-	-	-	-	-	4.5	2.7 (inc. 1x4000 lb)
WERNER	B	Moog. IX	3	2	1	-	-	-	-	-	-	-	-	-	1.8	-
WINDLO	B	Moog. IV	3	3	-	-	-	-	-	-	-	-	-	-	2.7	-
SCHWABST	B	Moog. IX	2	2	-	-	-	-	-	-	-	-	-	-	0.9	-
HERBENVILLE	B	Moog. IX	1	1	-	-	-	-	-	-	-	-	-	-	0.9	-
DOERING TOTAL			600	604	27 + 1*	9	61	79	12	4+10AC+2B	5+2E	4+8AC+1B+1E	50	97		
Mine laying	B HP	Hal. II	4	4	-	-	-	-	4	-	1 AC	-	-	-	6 mines	169 mines 5 alt.
NEEL HANDEEN	B	Moog. III	45	43	0	-	-	-	-	-	1 AC	-	-	-	-	-
MINE LAYING TOTAL			49	47	0	-	-	-	4	-	1 AC	-	-	-	175 mines	-
SERRATE	100	Moog.	12	8	-	6	-	-	-	-	-	-	-	-	-	-
NEY BOCCO	B	Moog.	2	2	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL			923	914	27 + 1*	9	61	79	13	4+10AC+2B	5+1AC+2E	4+8AC+1B+1E	50	97		
TSP. GP.		Various	5	-	-	-	-	-	-	-	-	-	-	-	-	-

IGS/L.S.
C.R.S. 3.

* Also attached primary.

+ Not included in total.



BOMB PLOT NOT AVAILABLE

MOST SECRET

NIGHT RAID REPORT NO. 538

COPY NO. 16

41 N
MAY 1944
413

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

20/21st FEBRUARY, 1944.

STUTTGART : Munich : Enemy Airfields : Minelaying : Leaflets etc.

598 aircraft were sent to Stuttgart, which had not been heavily raided for 3 months. The city was covered with 10/10ths cloud, with a clear area to the west, where most of the bombing fell. Considerable, though scattered damage was caused in Stuttgart itself; the Robert Bosch and Daimler-Benz works both being heavily hit. Diversionary attacks on Munich and airfields in the Low Countries, as well as a bullseye operation over the North Sea, successfully distracted the attention of the fighters from our main force, only 2 of which were lost.

In addition to the above operations, Wellingtons and Stirlings laid 167 mines off the Frisians and the French Channel and Atlantic ports, and Mosquitoes carried out net, reconnaissance flights and intruder patrols, destroying one aircraft and damaging another. One Wellington was lost on Brest.

WEATHER FORECAST

Basics:- A weak cold front will affect operational areas, lying at midnight from the Solent to Flamborough Head. Near this front, there will be a belt of strato-cumulus, tops 6-8,000', with light snow showers. Southwards, much cumulus with good breaks; tops 6-7,000', with no cloud above. Variable winds, locally severe.

Continent:- Between lines Kiel - S. of Stettin - 52 N. 20 E. in the North, Havre - Cologne - Kassel - Prague in the South, there will be extensive clouds in strato-cumulus, and moderate to good visibility. N. and S. of these lines, much strato-cumulus with light snow showers. A few breaks in S. part: extensive strato-cumulus, tops 6-8,000', base 2-3,000', over whole of N. France, except for good breaks in N. France.

STUTTGART

ROUTE

Route. Beachy Head - 50 00'N. 01 15'E - 47 52'N. 03 55'E - STUTTGART - 47 09 12'E - 50 00'N. 01 15'E - Beachy Head.

Route Marking. On the way out, blind markers and blind backers-up were to hold steady flares 66 miles S. of the target.

Method of Attack. Primary blind markers were to mark the aiming point with T.I. and release-point flares (green/red stars); but if their H2S was not working, they were to hold their markers and act as supporters. Blind backers-up were to keep the aiming-point marked throughout the raid with green T.I. and release-point flares; if their H2S was unserviceable, they were to act as visual backers-up, retaining their flares. Visual backers-up were to aim greens at the centre of all visible T.I. with no overshoot; but if the cloud was so thick as to obscure T.I., they were to hold their T.I. and bomb blindly, or aim at the flares leading of 0200H. Supporters were to bomb blindly, if possible, otherwise on a good D.R.; but if T.I. had already been dropped, they were to aim at the centre of all T.I., or at release-point flares as detailed above. 30 aircraft of 1 Group were to join the supporters, bombing blindly or aiming at T.I. visible; or attacking on a good D.R. Main Force aircraft were to aim at the centre of all greens, or at the centre of release-point flares as detailed above. They were warned not to bomb before zero.

/Timing.....

7. Timing Zero hour: 0400 Duration of attack: 0350

Primary blind markers	20 a/c at zero - 2.
Special blind backers-up	10 a/c from zero to zero + 14 (one per min. none at zero +3, +4, +7, +11 and +14)
Blind backers-up	19 a/c from zero +1 to zero +15 (one per min. but none at zero +2 and 2 at zero +13 and +15).
Visual backers-up	20 a/c from zero to zero +15 (one per min. at zero, zero +1, +5, and +9).
Supporters	59 a/c at zero - 2. 5 a/c at zero + 8.
Main Force	135 a/c from zero to zero + 4. 39 a/c from zero +4 to zero +7. 88 a/c from zero +7 to zero +10. 121 a/c from zero + 10 to zero +14. 17 A.T.C. aircraft spread throughout the at

8. Marker Loads

Primary blind markers.	1x4 flares (green/red stars) + 4 red T.I. (2 L)
Special blind backers-up	2x4 " " " " + 8 green T.I. (4 L)
Blind backers-up	1x4 " " " " + 4 green T.I. (2 L)
Visual backers-up	4 green T.I. (2 L)

9. WINDOW. WINDOW was to be dropped at the rate of one bundle per minute except within 50 miles of the target, where the rate was to be doubled. 6 Mosquitoes were to drop WINDOW at maximum rate from a point 10 miles from the target, and bomb Stuttgart at zero - 6, releasing the remainder of their WINDOW with their bombs.

10. Diversions. 8 Mosquitoes were to carry out a feint attack on Munich at zero - 5 to zero - 4, dropping T.I. and H.E. A bullseye exercise over the Sea was designed to act both as a fighter affiliation exercise and as a diversion for the attack on Stuttgart.

SORTIES

11. (a) No. of aircraft despatched.....	593
(b) No. of aircraft reporting attack on primary area.....	544
(c) No. of aircraft reporting attack on alternative area.....	6
(d) No. of abortive sorties (tech. defect or manip. error.....)	33
(e) No. of aircraft missing.....	9
	(crew failure..... 6)

WEATHER EXPERIENCED

12. Bases:- Mainly fit all night with 8-10/10ths strato-cumulus, tops 5-7, base 2-3,000'. Local wintry showers with a few patches of cloud at 1,000' or below. Good visibility (moderate to poor in showers). Very variable icing in cloud; mostly low to moderate. St. Elmo's fire near cloud tops.

Route:- 10/10ths strato-cumulus, base 2,500', tops 5-6,000'. Extensive breaks overland. Thick snow on ground.

Target:- 10/10ths strato-cumulus, tops 7-8,000', at start of attack, breaking quickly to small amounts, possibly because of convection from fires. Good visibility. No moon. Persistent contrails at 26,000'.

Winds at 20-25,000':- 055°/40 m.p.h. over route
055°/35 m.p.h. over target
Surface wind at target: NE'ly, 10-15 m.p.h.

PHOTOGRAPHIC STATISTICS

No. of photographs plotted in target area	(ground detail.....2)	.....28
	(fire-tracks.....26)	
No. of photographs plotted off target area	(ground detail.....98)	.....302
	(fire-tracks.....24)	
No. of aircraft estimated to have bombed in target area	(maximum.....	46
	(minimum.....	28
	(prob.figure....	42
No. of aircraft estimated to have bombed within 3 miles of aiming point	(maximum.....	190
	(minimum.....	119
	(prob.figure....	172
(No. of aircraft reporting attack	.....	54)

RELATIVE OF ATTACK

The first red T.I. went down at zero - 3, and by zero hour all the primary markers had bombed. There was little or no cloud N. of the town, and 7 of 12 primary blind markers which dropped T.I. have been plotted by ground detail distances of 2-9 miles N. and N.E. of the aiming-point. 2 photographed cloud, were probably over the target. Blind backers-up began to arrive at zero - 1, dropped flares and T.I. at regular intervals until zero + 15. Only 2 have plotted both 4-5 miles N. of the aiming-point; 7 others show numerous fire-tracks and may belong to this northern concentration, but 8 show cloud and may therefore be of the target area. The visual backing-up was rather thin and mostly concentrated to the north, since these aircraft were aiming at T.I. visible on ground; and most of the main force followed suit. A good concentration was built-up between the river and the marshalling yards at Kornwestheim, about 5 miles N. and N.E. of the aiming-point.

RECONNAISSANCE

Damage was scattered through the town, and in places severe, although no areas were devastated. At midday on 21st February, Stuttgart was covered with a layer of smoke, beneath which fires ranged apparently unchecked. The works of Robert Bosch A.G., Feuerbach (priority 1-), the chief manufacturer in Germany of injection pumps, sparking plugs and magnets; Daimler-Benz A.G., Unterturkheim (engines and armaments, priority 1+) and Vauxsiedle Kugellager Fabrik, Bad Cannstadt (ball bearings, priority 1) were all seriously hit, the first-named being extremely grave damage. Other industries severely affected include Messerschmitt-Maschinenfabrik A.G. (submarine components, priority 2), Municipal Works (priority 2), Bad Cannstadt Goods Yards (priority 2), J.C. Eckhardt A.G., measuring instruments, priority 2), Leichmetallbau (sheet metal works in light metal, priority 2). Railway Repair Shops (priority 2), Kneidlers (pressed and drawn rods, priority 2), Salamander A.G. (loading boot and shoe manufacturer), W. W. W. (corrugated paper), C. Haushahn (lifts and cranes), Martenburgerische Maschinenfabrik (priority works and the main railway station). The town centre and Altstadt sustained considerable business and residential damage.

ALTERNATIVE TARGETS

6 aircraft bombed alternative targets, in the areas of: Diempe (2), Poix, Bornberg and Coby-Barville.

...../Enemy Defences..

- 5 -

to bunts near Overflakkeo. At the same time, 4 Mk.II FORTRESS Mosquitoes attacked Gilze Rijen, and 7 FOUNTAIN PEN aircraft bombed Duclen and Volkel, all after successfully controlled runs. No casualties were sustained.

NINE B L A Y I N G.

4. 34 Stirlings and Wellingtons were sent to lay mines off the French Channel and Atlantic ports and the Frisians. 31 completed their missions, laying 167 mines. 2 aircraft returned early; and one was lost to unknown causes.

S E R R A T E.

5. 7 Mosquitoes of 100 Group, 5 of 2 Group and 16 of A.D.C.P. were sent on offensive patrols over Germany, France and the Low Countries. One of 100 Group shot down a Mk.110 and one of A.D.C.P. claimed another aircraft as damaged. None of our fighters was lost.

L E A F L E T S.

6. 4 U.S. Postresses scattered leaflets over N. France without loss.

W E T. W H O O P.

7. One Mosquito of 8 Group completed a net. reconnaissance flight without incident.

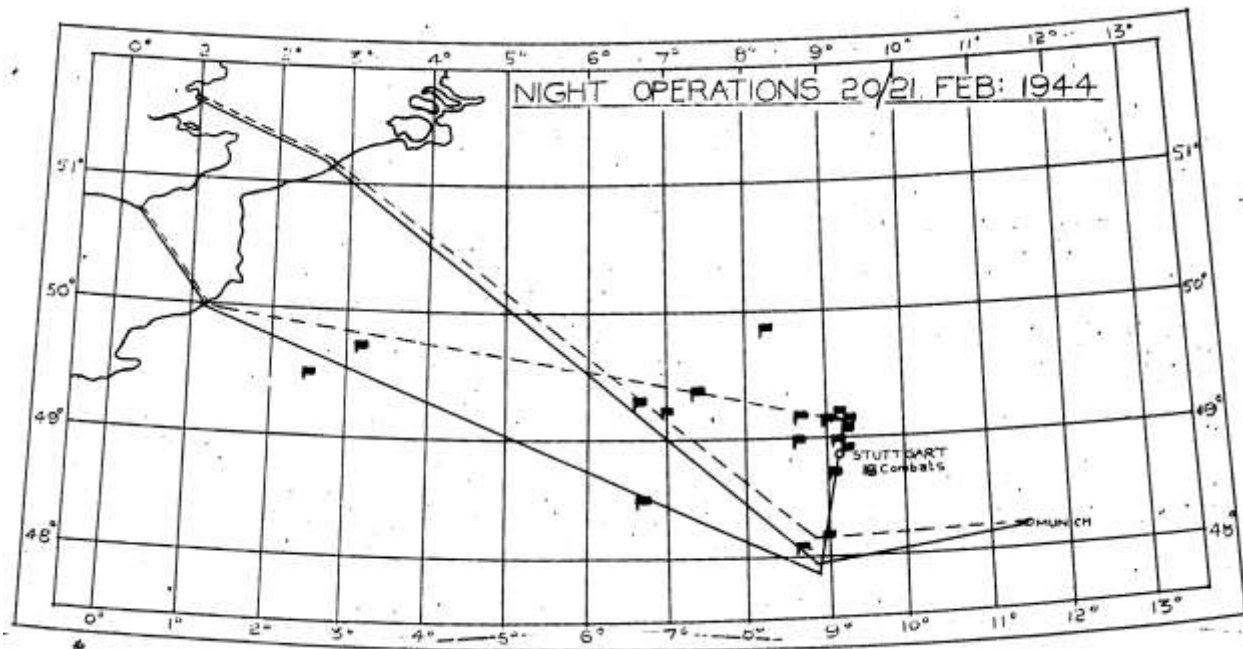
LM/P/D.
O/S. 26342/2/CRS4.
at War, 1944.

TARGET	GROUP	MISC PT TYPE	SORTING	L/C REPORTING ATTACK ON				JOINT REPORTING		DIRECTIONS				LOS PERCENT		
				PREL. PER.	ACT. PER.	OVER R.T.	NOT OVER R.T.	DIR. IN	DIR. OUT	DIR. IN	DIR. OUT	ATTACKED	NOT ATTACKED	W.L.	Ino.	
STUTTGART	B 777	Hal.	2	1	-	-	-	1	-	-	-	-	-	-	-	7076.8 976.1 Heavy Bombs 1436,000lb. 3094,000lb.
		Hal. III	10	10	-	-	-	-	-	-	-	-	-	-	-	
		Lang. III	53	48	-	-	1	4	-	2	-	-	2	4	-	
	B H.F.	Lang. IV	10	10	-	-	-	-	-	-	-	-	-	-	-	
		Lang. XVI	2	2	-	-	-	-	-	-	-	-	-	-	-	
		Hal.	4	3	-	-	-	1	-	-	-	-	-	-	-	
	1 SUPP.	Lang. III	27	23	-	-	-	3	1	-	-	-	-	-	-	
		Lang. I	3	3	-	-	-	-	-	-	-	-	-	-	-	
		Lang. III	26	26	-	-	-	-	-	-	-	-	-	-	-	
	1 H.F.	Lang. I	35	36	-	-	-	1	-	1	1.0+1	-	1	4	-	
		Lang. III	66	63	-	-	2	1	-	3	1.0	1E	4	4		
		Lang. I	10	9	-	-	1	-	-	-	-	-	1	1		
3	Lang. II	31	29	-	-	-	1	-	1.0	2.0	1E	2	4			
	Lang. III	8	6	-	-	-	1	-	-	-	-	-	1			
	Hal. III	69	57	-	-	2	2	2	-	1E+1.0	-	2	6			
5	Lang. I	54	51	-	-	-	2	-	1	1	-	2	4			
	Lang. III	122	112	-	-	1	5	3	-	1	2E	-	5			
	Hal. III	41	34	-	-	2	5	1	2	1.0	1E	-	4			
6	Lang. II	25	25	-	-	-	-	3	-	-	-	1	3			
	Lang. II	25	25	-	-	-	-	-	-	-	-	-	-			
STUTTGART TOTAL			590	544	6	7	32	9	13	1.0+2	1E+1.0	15	36	W.L. Ino.		
MUNICH	B	Lang. IX	3	2	1	-	-	-	-	-	-	-	-	-	3.1 0.3	
		Lang. IV	2	2	-	-	-	-	-	-	-	-	-	-		
		Lang. XI	2	1	1	-	-	-	-	-	-	-	-	-		
MUNICH TOTAL			7	5	2	-	-	-	-	-	-	-	-			

...../over.

STUTTGART: MUNICH: BOMBING: FEBRUARY: 20/21st. FEBRUARY, 1944.

TARGET	GROUP	MISC PT TYPE	SORTING	L/C REPORTING ATTACK ON				JOINT REPORTING		DIRECTIONS				LOS PERCENT	
				PREL. PER.	ACT. PER.	OVER R.T.	NOT OVER R.T.	DIR. IN	DIR. OUT	DIR. IN	DIR. OUT	ATTACKED	NOT ATTACKED	W.L.	Ino.
LEWIS AND CLARK	B	Lang. IX	2	2	-	-	-	-	-	-	-	-	-	-	1.0
PROBING	B	Lang. IX	2	2	-	-	-	-	-	-	-	-	-	-	1.0
GILBE HILLES	B	Lang. IX	4	4	-	-	-	-	-	-	-	-	-	-	1.0
VALLEY	B	Lang. IX	3	3	-	-	-	-	-	-	-	-	-	-	1.0
WIND	B	Lang. IV	2	2	-	-	-	-	-	-	-	-	-	-	1.0
WIND	B	Lang. IV	4	4	-	-	-	-	-	-	-	-	-	-	1.0
WIND	B	Lang. IX	1	1	-	-	-	-	-	-	-	-	-	-	1.0
WIND	B	Lang. IX	2	1	-	-	-	-	-	-	-	-	-	-	1.0
WIND TOTAL			3	2	1	-	-	-	-	-	-	-	-	-	1.0
ST. HELENS	B	Lang. IX	1	1	-	-	-	-	-	-	-	-	-	-	1.0
		Lang. IV	2	1	-	1	-	-	-	-	-	-	-	-	1.0
ST. HELENS TOTAL			3	2	-	1	-	-	-	-	-	-	-	-	1.0
STUTTGART TOTAL			629	571	9	8	32	9	13	1.0+2	1E+1.0	15	36	W.L. Ino.	
WIND	100	W.L. I	6	4	-	-	1	1	-	-	-	-	-	-	8 miles
		W.L. II	2	2	-	-	-	-	-	-	-	-	-	-	11 miles
		W.L. III	2	2	-	-	-	-	-	-	-	-	-	-	12 miles
		W.L. IV	2	2	-	-	-	-	-	-	-	-	-	-	12 miles
		W.L. V	2	2	-	-	-	-	-	-	-	-	-	-	12 miles
WIND TOTAL			34	31	-	-	2	1	-	-	-	-	-	167 miles	
WIND	100	Lang.	7	6	-	1	-	-	-	-	-	-	-	111 miles	
WIND	100	Lang.	4	4	-	-	-	-	-	-	-	-	-	111 miles	
WIND	100	Lang.	1	1	-	-	-	-	-	-	-	-	-	111 miles	
TOTAL			671	609	9	9	34	13	17	1.0+2	1E+1.0	15	36	W.L. Ino.	



BOMB PLOT NOT AVAILABLE

BOEHR COLAID REPORT ON NIGHT OPERATIONS.

21/22nd. FEBRUARY, 1944.

1. 1944

Stuttgart; Duisburg; Sottovast; Herbouville; Hinfelving; leaflets, etc.,

418

Stuttgart. 6 Mosquitoes (including one Y-aircraft) were sent on a harassing raid against Stuttgart. The Y-aircraft dropped red TI and green flares continuously, and 3 aircraft bombed on the flares. A fourth, which took off an hour late, bombed on D.R. from a GEE fix, and the remaining aircraft abandoned its task because of engine trouble. All returned undamaged.

Duisburg. 3 OBOE Mk. I Mosquitoes were despatched against Vereinigte Werke at Duisburg/Hamborn. All made successfully controlled runs, and returned safely.

Sottovast. 4 Mk. I and 2 Mk. II FOURMANN-LEN Mosquitoes were detailed to attack the military construction at Sottovast. All made successfully controlled runs except one FOURMANN-LEN aircraft, which bombed on a GEE fix. All returned safely.

Herbouville. 2 Mk. II FOURMANN-LEN Mosquitoes were sent against the military construction at Herbouville; but both experienced OBOE failure, and one bombed on a GEE fix and the other on a GEE fix.

Hinfelving. 41 Stirlings, Halifaxes and Wellingtons were detailed to lay mines off the French Atlantic ports and the Frisians. 35 completed their task, and laid 121 mines. One Stirling was lost.

Other operations. Wellingtons and U.S. Fortresses scattered leaflets over northern France, and Mosquitoes carried out nocturnal reconnaissance flights and intruder operations, all without loss. No enemy aircraft were seen.

W. FORECAST.

Midnight frontal positions:- (1) cold from 63°W. 05½°E. - 60 E. 06 E. - 55 W. - Danzig (2) S.W. England - Isle of Wight - Frankfurt - Breslau. But these have little significance in weather.

Basin:- Mainly fit all night, apart from wintry precipitation, which will be temporary local deteriorations. 5-8/10ths. strato-cumulus, base 2,000' (with rain in precipitation to base; 1,000'); tops 6-7,000'. Variable icing, locally severe. Good visibility, except very locally.

Germany:- Unbroken strato-cumulus (base 2,000', tops 5-7,000') except in Hamburg-Bremen-Hannover area, sheltered by Scandinavia, where there will be no clearances. Ruhr also may be free of cloud.

France:- 8-10/10ths. strato-cumulus, base 1,500-2,500', tops 6-9,000', with 1 breaks to 5-7/10ths. Moderate visibility below cloud. Slight risk of rain precipitation in N.W.

IES.	Bombing	Hinfelving	Other ops.
(a) No. of aircraft despatched.....	17	41	14
(b) No. of aircraft reporting attack on primary area..	16	36	12
(c) No. of abortive sorties (tech. defect... 4) (icing..... 3)	1	4	2
(d) No. of aircraft missing.....	0	1	0
(e) No. of mines laid.....		121	

W. FORECAST.

Basin:- Variable strato-cumulus, with very occasional wintry showers. Moderate visibility.

/Duisburg-

Duisburg-Stuttgart:- Little strato-cumulus over Holland and N. Germany, increasing to 8-10/10ths. over Duisburg and southwards, tops 8,000'. Cirrus increased to 10/10ths. over Stuttgart, base 23,000', tops 27,000'. Slight icing.

W. Franco:- 9-10/10ths. strato-cumulus, tops 8,000'. Severe icing in over S.W.

Frisians:- No cloud, moderate visibility. Much strato-cumulus in Bight area.

WEXY MESSAGE.

10. No fighters were seen. Slight flak was met from Duisburg and Rotterdam.

CASUALTIES.

11. One Stirling did not return from the Frisians. It was probably shot down by flak at Borkum, where several crews saw an aircraft burning on the ground. All other aircraft returned undamaged.

ICW/LAS

BC/S. 26342/5/ORS 4

30th April, 1954

TARGET	CP.	AIRCRAFT TYPE	BOULES	A/C EMPLOYING APPROX ON		DAMAGE LOCITIES		DUS-ING	FLAK	FIGHTER	DUSC. IN FLIGHT	OTHER CAUSES	ATTACKED	NOT ATTACKED	DODD TONNAGE		
				FROM AREA	ALT. AREA	OVER E.T.	OVER E.T.								H.B.	INC.	
STUTTGART	8	Meq. IV	6	5	-	-	1	-	-	-	-	-	-	-	-	4.0	0.1
DUISBURG	8	Meq. IV	1	1	-	-	-	-	-	-	-	-	-	-	-	2.7	-
		Meq. IV	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-
DUISBURG WYLL			3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
SOESTEN-SEE	8	Meq. IV	6	6	-	-	-	-	-	-	-	-	-	-	-	5.4	-
HERSCHEVILLE	8	Meq. IX	2	2	-	-	-	-	-	-	-	-	-	-	-	1.8	-
LA ZINC WYLL			17	16	-	-	1	-	-	-	-	-	-	-	-	-	-
<u>WEXY MESSAGE</u>																	
LONGENT	1	Well. X	4	4	-	-	-	-	-	-	-	-	-	-	-	6 mines	-
TRISLANS	3	Stir.	12	11	-	-	-	1	-	-	-	-	-	-	-	66 "	-
RYONNE		Stir.	5	-	-	-	3	-	-	-	-	-	-	-	-	-	-
ST. JEAN DE LUZ		Stir.	2	2	-	-	-	-	-	-	-	-	-	-	-	6 mines	-
CERONDE	4	Halifax	10	9	-	-	1	-	-	-	-	-	-	-	-	22 "	-
LA PALANCE	6	Halifax	10	10	-	-	-	-	-	-	-	-	-	-	-	19 "	-
CUMULATIVE TOTAL			54	52			3	1	1							121	
LEAFLETS	91	Well. III	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-
		Well. X	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	92	Well. III	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
		Well. X	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
			10	10	-	-	-	-	-	-	-	-	-	-	-	-	-
SEMOISE	100	Meq.	5	1	-	-	2	-	-	-	-	-	-	-	-	-	-
LEAFLETS*	3 USDC	Yostress	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-
INT. FORCE	8	Meq.	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL			72	64			3	4	1								

* Not included in Grand Total.

Leaflets on:- St. Inle, Gruenville, Argentan, Laval, Le Mans, Alencon, Lander, Rouen, Caen, Paris.

ICW/LAS
BC/S.

419

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

420

22/23rd FEBRUARY, 1944

Stuttgart: Aachen: Duisburg: Minelaying: Met. Recon etc.

DAY

Stuttgart. 10 Mosquitoes (including one equipped with H2S) were sent on crossing raid against Stuttgart. The 1 aircraft and 7 others attacked the city. The remaining 2 aircraft returned early with technical trouble.

Aachen. 30BOE Mk.I Mosquitoes were despatched to Aachen. One attacked ROBE; the others abandoned their task for technical reasons.

Duisburg. 8 Mk.I Mosquitoes were detailed to attack Vereinigte Werke at Duisburg/Hamborn. 4 made successfully controlled runs, the rest being the primary area on D.R. from precision fixer.

Minelaying. 111 Stirlings and Halifaxes were despatched to lay mines in the Harbours, the Kattegat and Heligoland Bight, but all were recalled owing to weather at bases.

Other operations. One Mosquito carried out a met. reconnaissance flight about midnight. No aircraft was missing from the night's operations.

THE FORECAST

Midnight frontal positions:- (1) cold from Alps - Vienna, then eastwards
warm from 55 N. 19 E. - Kiel - S. Scotland (3) cold from 55 N. 19 E. - Oslo.

Bases:- Cloudy: 8-10/10ths mixed cumulus and strato-cumulus at dusk, tops 5,000', base 3,000', but lower locally. Later, cumulus will clear, leaving strato-cumulus between 1,000' and 5-6,000'. (1710 hours: solid cloud was reported over Lines. to 12,000', with severe icing.)

Germany:- Much strato-cumulus in S., base 1,000', tops 7-8,000'. Crossing medium and low cloud in N. coastal area. Elsewhere, patchy strato-cumulus and high cloud, with moderate to good visibility. A strato-cumulus sheet will move over the country during the night from the N.E., reaching Frankfurt about 0200.

Denmark:- At midnight a warm front will lie from E. to W. through Kiel, with 10/10ths stratocumulus, base 1,500', tops 6,000', with layers of medium cloud above. Later the low cloud will break up.

TIPS

	<u>Bombing</u>	<u>Minelaying</u>	<u>Met. Recon.</u>
(a) No. of aircraft despatched.....	21	111	1
(b) No. of aircraft reporting attack on primary area.....	18	0	1
(c) No. of abortive sorties (recalled..111) (tech.defect. 3).....	3	111	
(d) No. of aircraft missing.....	0	0	0

OTHER INFORMATION

Bases:- After dusk, cloud cleared over southern bases to small amounts, but there was much cloud N. of the Wash, with local rain and patches below 1,000'. The rain moved south into East Anglia and the Midlands during the night, bringing with it very poor visibility.

/Stuttgart.....

Start:- 10/10ths., tops 16,000'.

Ruhr:- No cloud.

ENEMY DEFENCES

9. No fighters were seen. Intense flak was met from Stuttgart and Duis

CASUALTIES

10. All aircraft returned unharmed.

HLM/VD.
BC/S. 26342/6/ORS4.
1st Day, 1944.

TARGET	CP.	ALIAS TYPE	SERIES	ATTACK OF		SERIES		ING	CAUSE				ATTACKED	NOT ATTACKED	BOMB TONNAGE	
				PREV. AREA	ALL. AREA	OVER E. T.	NOT OVER E. T.		FLAK	FIGHTER	MISC. IN FLIGHT	OTHER CAUSED			N.E.	INC.
STUTTGART	8	Meag. XI Meag. XVI Meag. XX Meag. IV	3 2 2 3	3 2 2 3	- - - -	- - - 1	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	5.1	0.9
STUTTGART TOTAL			10	9	-	1	-	-	-	-	-	-	-	-		
LUZERN	8	Meag. IV	3	1	-	1	1	-	-	-	-	-	-	-	0.9	-
DUISBURG	8	Meag. IX Meag. IV	7 1	7 1	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.3	-
DUISBURG TOTAL			8	8	-	-	-	-	-	-	-	-	-	-		
RUHRING TOTAL			21	18	-	1	2	-	-	-	-	-	-	-		
ENGLAND																
KIEL	8	Halifax	4	-	-	-	-	-	-	-	-	-	-	-	-	-
KIEL	3	Stirling	50	-	-	-	-	-	-	-	-	-	-	-	-	-
WATERLOO	4	Halifax	35	-	-	-	-	-	-	-	-	-	-	-	-	-
WATERLOO	6	Halifax	32	-	-	-	-	-	-	-	-	-	-	-	-	-
ENGLAND TOTAL			111	-	-	-	111	-	-	-	-	-	-	-	-	-
SPECIAL CP.	100	Well.	2*	1*	-	-	1*	-	-	-	-	-	-	-	-	-
NET. RECS	8	Meag.	1	1	-	-	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL			133	15	-	1	115	-	-	-	-	-	-	-		

W/L.S.
S.P.S.K.

* Not included in total x Recalled.

HOST SECRET

TIME 17 MAY 1944
NIGHT B.L.D. REPORT NO. 535 **422**
COPY NO. 6

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

23/24th FEBRUARY, 1944.

Dusseldorf : Leaflets : Serrate : Met. Recon.

BY

Dusseldorf. 17 Mosquitoes, including 6 C/OB markers (3 Mk.I, one Mk.II MAIN PEN and 2 Mk.II PENWIPER) were sent on a harassing raid against Dusseldorf. PENWIPER and one FOUNTAIN PEN aircraft dropped TI accurately after successfully rolled runs, and these were easily identified by the back-up in clear air. All the aircraft returned safely.

Leaflets etc. Wellingtons and Portresses scattered leaflets over Northern France, and Mosquitoes carried out intruder patrols and met. reconnaissance flights, all without incident.

WATER FORECAST

Bases:- Strato-cumulus, base 1,500-2,000', with patches at 1,000'. Showers.

Germany:- 10/10ths strato-cumulus over N.W. coast, base 1,500', tops 7-8,000'. No cloud inland. Variable strato-cumulus in S., with extensive clearances. Average visibility.

RESULTS

	<u>Bombing</u>	<u>Other ops.</u>
(a) No. of aircraft despatched.....	17	6
(b) No. of aircraft reporting attack on primary area.....	16	5
(c) No. of abortive sorties (tech.defect).....	1	1
(d) No. of aircraft missing.....	0	0

WATER EXPERIENCED

Bases:- Broken cumulus and strato-cumulus dispersed gradually after dusk. Mist and fog patches formed in E Group by 2200.

Ruhr:- Little or no cloud. Hazy.

ENEMY DEFENCES

Intense and accurate flak was met over Dusseldorf, where the guns cooperated with two searchlight cones, each of 50-60 beams. No fighters were encountered.

REMARKS

All aircraft returned safely. 2 were slightly damaged by flak.

V/FTD
/S.26342/6/ORS4.
2 May, 1944.

23/24th FEBRUARY, 1944

TARGET	GROUP	AIRCRAFT TYPE	SORTIES	./O REPORTING ATTACK ON		A/O REPORTING SORTIES		MOS- D/C	FALL	FIGHTER	FREQ. IN FLIGHT	OTHER CLASSES	EFFECTS TO BE		DMSB NUMBER
				FALLS. ARE.	A/T. ARE.	OVER E.T.	NOT OVER E.T.						RECORD	NOT RECORDED	
DORLANDS	8VP	Mosq. IV	1	1	-	-	-	-	1	-	-	-	-	-	15.0 0.3 (incl: 1240001b)
	8 VP	Mosq. IX	5	4	-	-	-	-	-	-	-	-	-	-	
		Mosq. IV	11	11	-	-	-	-	-	-	-	-	-	-	
DORLANDS TOTAL			17	16	-	-	-	-	2	-	-	-	-	-	
LEWIS	92	Vell. A	3	3	-	-	-	-	-	-	-	-	-	1	
SENSE	100	Mosq.	2	1	-	-	-	-	-	-	-	-	-	-	
NEW YORK	8	Mosq.	1	1	-	-	-	-	-	-	-	-	-	-	
M(LR. FLETS	8000	Portnac	5	5	-	-	-	-	-	-	-	-	-	-	
GRAND TOTAL			25	21	-	-	-	-	2	-	-	-	-	1	

* NOT INCLUDED IN GRAND TOTAL

BCE/JT.
O.B.S. J.

LR. FLETS 47- 4818; SENSE 12 1143; LEWIS 0844.8; CLASSES:

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

24/25th FEBRUARY, 1944

SCHWEINFURT : Aachen : Kiel : Enemy Airfields : Minelaying : Patrols

501001
A. M. W. R.
25 MAY 1944
TIME

734 aircraft were despatched against Schweinfurt. 2 attacks were delivered, at an interval of 2 hours; this manoeuvre, coupled with diversionsary operations in the North Sea and the Baltic, successfully deceived the enemy fighter controllers, and only 33 bombers were lost - a small proportion for so distant a target. The attacks were marred by bad undershooting, after good primary marking, but together with the U.S. VIIIth B.C. attack the previous day, caused considerable damage to the city's ball-bearing industries.

Mosquitoes made a diversionsary attack on Kiel, dropping 4,000 lb. bombs, and diversion raids against Aachen and airfields in the Low Countries. Many mines were laid in Kiel Harbour, the Kattegat and the Biscay; and our fighters destroyed 3 enemy aircraft over the Continent. From these subsidiary operations, 2 Stirlings and one Liberator did not return.

WEATHER FORECAST

Bases:- Little or no cloud S. of the Humber; 10/10ths strato-cumulus in 4 Groups, base 4,000', tops 5,000'. No visibility troubles S. of Felixstowe-Whitby; Groups will be able to land their aircraft.

Germany:- N. of 52°N. and E. of 10°E.: variable amounts of strato-cumulus, 1,500-2,000', tops 6,000', with broken medium cloud above. Fine weather over rest of Germany, with moderate visibility. Valley fog will develop late in the night. Schweinfurt: cloudless over entire route; moderate visibility.

France:- Broken strato-cumulus in N.W. Much low and medium cloud in S.W., with occasional wintry precipitation. Moderate visibility.

Denmark:- Broken strato-cumulus, tops 6,000'.

SCHWEINFURTROUTE OF ATTACK

Route. (out) Beachy Head - 50 10'N. 01 30'E - 48 36'N. 08 36'E. - SCHWEINFURT.
 (home) 1st attack SCHWEINFURT - 50 15'N. 10 25'E - 50 30'N. 07 20'E - 50 00'N. 01 20'E. - Beachy Head.
 2nd attack SCHWEINFURT - 50 15'N. 10 25'E. - 50 20'N. 10 00'E. - 48 36'N. 08 36'E. 50 10'N. 01 30'E. - Beachy Head.

Route-marking Y-aircraft were to drop red steady flares 17 miles S.W. of Beachy Head for both forces on the way out. On the homeward trip, Mosquitoes were to drop red T.I. at Aachen (off track) for the first force, and Y-aircraft were to drop red steady flares 15 miles N.W. of Strasbourg for the second force.

Method of Attack The 1st attack was planned as a NIGHT/VEIN with emergency sky-marking. If there was less than 7/10ths cloud, primary blind markers were to mark the aiming point with green T.I. and illuminating flares. But if there was thick cloud, they were to hold their illuminating flares and drop release-point flares (red/green) with their T.I. The visual markers were to mark the exact aiming-point with T.I. after certain visual identification. If unable to see ground detail, they were to aim rods at the centre of greens. But if a NIGHT/VEIN attack seemed impracticable, they were to hold their T.I. and join the blind backers-up. The latter were to

/drop no flares

drop no flares or markers in the event of a NEWHAVEN attack; but if there was a cloud, they were to drop release-point (green/red stars) blindly. Visual backers-up were to keep the aiming-point marked with reds in the event of a NEWHAVEN attack at the centre of all earlier reds with a 2-second overshoot. If cloud obscured the T.I., they were to hold their T.I. and aim their bombs blindly, or at the release-point flares on a heading of 050°M. Supporters were to bomb blindly, or on a good D.R. They were not to wait for the blind markers, but might aim at T.I. or red point flares if already down. 30 Lancasters of 1 Group were to act as auxiliary supporters.

7. 2nd Attack This was planned as a mixed PARMUTTA and MANLNUJ Primary markers were to mark the aiming-point with greens and release-point flares (green stars). If their H2S was w/s, they were to hold all their markers and join the supporters. Blind backers-up were to keep the aiming-point marked throughout the raid with reds and release-point flares. Visual backers-up were to aim reds at centre of all visible T.I. with a 2-second overshoot. If cloud obscured the T.I. they were to hold their markers and bomb blindly or on the release-point flares on a heading of 050°M. Supporters were to bomb blindly or on a good D.R.; or, if markers were already down, at the centre of T.I. They were not to wait for the blind markers. 30 Lancasters of 1 Group were to join the supporters.

8. In each attack, main force aircraft were to aim at the centre of all reds if these were obscured by cloud, at the centre of all flares on a heading of 050°M.

9. Timing Zero hour: 2305 (1st attack) 0105 (2nd attack)
Duration of attack: (a) 2259 - 2313 (b) 0103 - 0113

1st attack

Primary blind markers	16 a/c at zero - 6
* Visual markers	6 a/c at zero - 4
Blind backers-up	6 a/c at zero - 2, - 1 (2), zero, zero + 2
Visual backers-up	14 a/c from zero to zero + 7 (2 per min. but one at zero + 2, + 4, + 6)
Supporters	50 a/c at zero - 6 2 a/c at zero + 4

* If the attack became a MANLNUJ, visual markers were to attack at zero (2), + 4, + 5, + 6 and + 7.

Main Force
137 a/c from zero to zero + 4
137 a/c from zero + 4 to zero + 8
14 A.B.C. a/c throughout the attack

2nd attack

Primary blind markers	12 a/c at zero - 2
Blind backers-up	8 a/c from zero to zero + 7 (one per min)
Visual backers-up	14 a/c at zero (3), zero + 1 (2), + 2, + 3, + 5 (2), + 6 and + 7 (2).
Supporters	43 a/c at zero - 2

Main Force
124 a/c from zero to zero + 4
123 a/c from zero + 4 to zero + 8
14 A.B.C. a/c throughout the attack

10. Marker Loads

1st attack

Primary blind markers	5x4 white flares + 4 green T.I. (2 LB) + 1 R/P flare int.
Visual markers	1x4 white flares + 10 red T.I. (4 LB) + 1 R/P flare int.
Blind backers-up	1x4 R/P flare
Visual backers-up	4 red TI (2 LB)

2nd attack

Primary blind markers	4 green T.I. (2 LB)
Blind backers-up	4 red T.I. (2 LB) + 1x4 R/P flares
Visual backers-up	4 red T.I. (2 LB)

Diversion 7 Mosquitoes were to drop T.I. and H.D. on Kiel at 2015. 7 more were to drop red T.I. and H.D. on Aachen between 2341 and 0011. 13 more were to attack aerodromes in the Low Countries and 2 more to bomb Schweinfurt at 0155 and 05 hours. A special Combined Command Bullseye exercise was to be carried out over North Sea (target position : 55 00'N. 06 00'E.) as a diversion.

WINDOW WINDOW was to be dropped at the rate of 2 bundles per minute within 3 miles of the target in both directions; and one bundle per minute for the rest of the route. 7 Mosquitoes were to fly ahead of the 1st force, and 5 in front of the 2nd, dropping large quantities of WINDOW.

STATISTICS

	1st Att.	2nd Att.	Total
(a) No. of aircraft despatched	392	342	734
(b) No. of aircraft reporting attack on primary area	338	297	635
(c) No. of aircraft reporting attack on alternative area	3	5	8
(d) No. of abortive sorties (tech. def. ..) (crew failure)	29	29	58
(e) No. of aircraft missing	22	11	33
	(5.6%)	(3.2%)	(4.5%)

OTHER EXPERIENCED

Bases:- Generally fit all night. Visibility above 3,000 yards except locally. No light showers.

Route and target:- Cloudless. Moderate to good visibility. No moon.
 Wind at 20,000':- 090°/40 m.p.h. at bases, veering to 110-120°/50-55 m.p.h. at target.

HE MATOGRAPHIC STATISTICS

(1st attack)

No. of aircraft plotted in target area (ground detail ... 6) (fire-tracks 1)	7
No. of aircraft plotted off target area (ground detail ..163) (fire-tracks ....100)	268
No. of aircraft estimated to have bombed in target area	7
" " " " " " within 3 miles of aiming-point (max. 119) (min. 110) (mean 117)	
(No. of aircraft reporting attack)	338)

(2nd attack)

No. of aircraft plotted in target area (ground detail ... 9) (fire-tracks 6)	15
No. of aircraft plotted off target area (ground detail ..133) (fire-tracks ....103)	241
No. of aircraft estimated to have bombed in target area (max. 20) (min. 15) (mean 19)	
No. of aircraft estimated to have bombed within 3 miles of aiming-point (max. 193) (min. 146) (mean 151)	
(No. of aircraft reporting attack	297)

NARRATIVE OF ATTACK

17. 1st attack The first primary blind marker bombed at zero - 7 and, by zero - 4, 7 salvoes of greens had been dropped. All these aircraft were plotted from just S. of the aiming-point to 3-4 miles N.W. The first 2 visual markers dropped their reds at zero - 3 (one ½ mile N. of the aiming-point) and, despite ragged marking in the next 10 minutes, the aiming-point seems to have been well marked with reds by zero hour. Thereafter, however, the marking grew steadily drawing further and further back along the line of approach. Of the last 4 visual markers-up to bomb, 2 were plotted 3 miles S. and S.W. and 2 nearly 6 miles S. of the aiming-point. The main force followed the backward drift of the markers-up only too faithfully, with the result that the centroid of the plot of night photographs at zero + 8 lies 6 miles to the S.

18. 2nd attack The greens of the primary blind markers lay in a triangle surrounding the aiming-point, with the apex 2 miles to the N.E. The aiming-point soon became well marked with reds, but again the markers-up bombed short, and the attack drifted back along the line of approach, although only half as far. Later reds fell within 1½ miles of the aiming-point, but the main force aimed first T.I. visible.

DAY RECONNAISSANCE

19. Photographs obtained on 5th March showed extensive damage to the vital bearing works of Kugelfischer, V.K.F. Werke I and II, Deutsche Star Kugelhalter Fichtel und Sachs A.G. All these factories were gravely affected, many buildings being destroyed or damaged. Numerous incidents occurred among business and residential property in the town, and in the villages of Garstadt and Grafenrheinfeld 5 miles S.W. and 2½ miles S. of Schweinfurt. Much of this damage was, however, caused by the American daylight attack on 24th February.

DAMAGE ASSESSMENT

20. The Research and Experiments Department of the Ministry of Home Security estimate that the Kugelfischer plant lost 7 weeks' production, and the V.K.F. 5 weeks' production, as a result of these attacks; with an additional loss of one week through absenteeism.

ALTERNATIVE TARGETS

21. 3 aircraft attacked alternative targets, in the areas of : Abbeville (2), Rheims (2), Longuyon, Douai, Soissons and Peronnas.

SPECIAL EQUIPMENT

22. H2S

	Mk.	Des-patched	ATTACKED		Miss-ing	Bombed Blindly	No. which dropped	
			H2S O.K.	H2S U/S			Flares	T.I.
Blind Marker	II	12	8	2	2	8	7	7
Illuminators	III	4	4	-	-	3	2	2
Primary	II	7	2	2	-	2	2*	2
Blind Markers	III	5	5	-	-	4	1*	4
Secondary	II	10	7	3	-	5	3*	3
Blind Markers	III	3	1	1	-	0	-	1
Other	II	230	149	43	11	9	-	27
Sorties	III	4	3	1	-	-	1	2

* These aircraft dropped sky-marker flares.

ENEMY DEFENCES

23. Ground Defences 50-100 searchlights were exposed at Schweinfurt in conditions most favourable to their operation, but they were inefficiently controlled. Few ones were forward. The heavy guns fired a moderate barrage, which decreased in intensity towards the end of each attack. Off track, the defences of Saarbrücken, Strasbourg, Stuttgart and Frankfurt were all active, but no serious opposition was met along the planned route. 3 bombers were seen shot down by flak, at Metz,

/Saarbrücken

brücken and Schweinfurt (2) in the first attack, and at Stuttgart (2) and
furt (2) in the second.

Fighters The strategy employed on 20/21st February was again used by the
with similar success. A bulls-eye exercise over the North Sea, and a mine-
operation to Kiel and the Kattegat, caused a large force of fighters to be
and held in the N. as the first bomber stream approached Schweinfurt, the
controllers moved their forces southwards from beacon to beacon, covering
fighters' approach but always keeping to the E. of probable targets. Only 15
took place on the outward route, 3 in the target area and 4 on the way home.
fewer combats were reported by the second force; 4 on the way out, 9 over the
and 2 on the way home. The fighter controllers moved their forces from the
furt area to cover a surprise deviation to a new target. 12 aircraft of the
force were seen to go down in combat; one near Abbeville, one near Verdan, 5
Saarbrücken, 3 between Saarbrücken and Schweinfurt and 2 over the target. Only
lost to fighters during the second attack; one near Stuttgart on the way out,
over the target, and 2 on the first leg of the homeward route. 2 unidentified
fighters were claimed as destroyed, one by a Lancaster near Stuttgart
the other by a P.F.F. Halifax S. of Saarbrücken. Fighters of A.D.G.S. secured
victories.

LOSSES

Nb. of aircraft missing	33 (4.5.5)
Nb. of aircraft damaged	51
	(flak 20)
	(fighter 5)
	(collisions 4)
	(homed defences. 4)
	(other causes .. 10)

As stated above, 8 losses are known to have been due to flak and 16 to
fighters. The causes of the other 9 losses are unknown. 4 other aircraft were in-
volved in collisions, 2 over England and 2 over the North Sea, but only one was
destroyed. Another was destroyed in a taxiing accident.

MACHEN

5 OBOE Mosquitoes (4 Mk.I, 2 Mk.II PENWIPER and 2 Mk.II FOURMINE PEN) were
detached on a diversionary attack against Machen. All made successfully controlled
runs except one Mk.I and one PENWIPER, which attacked on D.R. Red T.I. were dropped
all as H.E. All aircraft returned undamaged.

KIEL

7 non-OBOE Mosquitoes carried out another diversionary attack, against Kiel.
3 attacked on T.I., and the other on D.R. from a GEE fix. 3x4,000 lb. bombs were dropped.

ENEMY AIRFIELDS

8 Mk.I Mosquitoes were despatched against the airfields at Wenlo, Twentend
Front. 2 aircraft on each target made successfully controlled runs; one attacked
Wenlo airfield on D.R., and the sixth jettisoned. At the same time, 3 PENWIPERS
2 FOURMINE PENS bombed Deelen and Loeuwarden respectively, all by means of their
incision devices. All these aircraft returned undamaged.

MINELAYING

110 Halifaxes and Stirlings were sent to lay mines in the Kattegat and Kiel
area, as a diversion to the main attack on Schweinfurt. 99 reached their targets,
laying 227 mines. At the same time, 5 Wellingtons laid 10 mines off Lorient. 2
Stirlings did not return from Kiel; one was seen shot down by a fighter over Kiel
, and the other strayed over the port and fell to the light guns.

FIGHTER PATROLS

12 Mosquitoes of 100 Group were sent on Ferrate patrols. 6 completed their task,
without intercepting any enemy aircraft. One was lost without trace. 14 Mosquitoes of
A.D.G. carried out intruder patrols, destroying one Me.210, one Ju.88 and one unidenti-
fied twin-engined aircraft without loss to themselves.

MT.
3.26342/2/0.34
2 Nov. 1944

UNIT	GROUP	A INCL. TYPE	SORTING	A/C REPORTING		ABORTIVE		MISS-ING	D. I. S.		MISC. IN FLIGHT	OTHER C. I. S. S. I.	OTHER		TOTAL	BOB
				PREL. REL.	LT. ARR.	OVER % T.	NOT OVER % T.		PLK	P. I. S. S. I.			PL. O. I. S. S. I.	NOT AT. O. I. S. S. I.		
SOUTHWEST (1st. Attack)	B	Hal. III	13	13	-	-	-	-	2	-	-	3.0	1	1	Both attacks 1,225.7 1,064. Heavy Bomb 6x8,000lb. 429x1,000lb.	H. E. Inc.
		Lane III	29	26	-	-	3	-	-	-	-	-	-	-		
	IP	Nonq. IV	6	5	-	1	-	-	-	-	-	-	-	-		
		Hal. III	2	1	-	1	-	-	-	-	-	-	-	-		
	Supp.	Hal. III	5	5	-	-	-	-	-	-	-	-	-	-		
		Lane III	15	12	-	-	3	-	-	-	-	-	-	-		
	1	Lane I	2	2	-	-	-	-	-	-	-	-	-	-		
		Lane III	28	25	-	1	-	2	-	-	-	-	-	-		
	1	Lane I	19	18	-	-	1	-	-	-	-	-	-	-		
		Lane III	21	19	-	-	-	2	-	-	-	-	-	-		
	3	Lane I	6	6	-	-	-	-	-	-	-	-	-	-		
		Lane III	2	2	-	-	-	-	-	-	-	-	-	-		
	4	Lane II	16	12	-	-	4	1	-	-	-	-	-	-		
		Hal. III	87	69	1	5	0	2	1	-	1.0	1	2	3		
	5	Lane I	16	14	1	-	1	1	-	-	-	-	-	-		
Lane III		50	43	1	1	1	4	3	-	-	-	2	5			
5	Hal. III	64	53	-	-	0	3	3	-	1	2.0	-	1			
	Lane II	13	13	-	-	-	-	-	-	-	-	-	-			
TOTAL 1st. ATTACK			392	338	3	8	21	22	11	1.0	2	6.0	5	11		
* Diversionary Sweep		Various-including non-op units.		183												

...../over.

UNIT	GROUP	A INCL. TYPE	SORTING	A/C REPORTING		ABORTIVE		MISS-ING	D. I. S.		MISC. IN FLIGHT	OTHER C. I. S. S. I.	OTHER		TOTAL	BOB	
				PREL. REL.	LT. ARR.	OVER % T.	NOT OVER % T.		PLK	P. I. S. S. I.			PL. O. I. S. S. I.	NOT AT. O. I. S. S. I.			
SOUTHWEST (2nd. Attack)	B	Lane III	34	29	1	-	-	-	1	1+1.0	1+2.0	-	-	3	3		
		Nonq. VI	1	1	-	-	-	-	-	-	-	-	-	-			
	IP	Nonq. XI	2	2	-	-	-	-	-	-	-	-	-	-			
		Nonq. IV	2	2	-	-	-	-	-	-	-	-	-	-			
	Supp.	Lane III	12	11	-	-	1	-	-	-	-	-	-	-			
		Lane I	5	4	-	-	-	1	-	-	-	-	-	-			
	1	Lane III	23	20	-	-	3	-	-	-	-	-	-	-			
		Lane I	21	18	-	1	2	1	-	-	1.0+1.0	-	2	-			
	2	Lane III	27	17	2	-	2	3	-	-	1+1.0	1B+1.0	2	4			
		Lane I	15	11	-	1	-	1	-	-	-	-	-	-			
	IP	Lane III	5	3	-	-	1	1	-	-	-	-	-	-			
		Lane II	25	19	1	1	2	2	-	-	2	-	-	2			
5	Lane I	20	13	-	-	1	1	1	-	1.0	-	-	1				
	Lane III	75	65	1	-	8	1	1	1+1.0	5+1.0	-	3	10				
6	Lane II	22	19	-	-	1	2	-	-	-	-	-	2				
TOTAL 2nd. ATTACK			342	297	5	4	25	11	8+1.0	2+2.0	10+5.0 +1E	1B+1.0	13	20			
SOUTHWEST TOTAL			734	635	8	2	46	17	13+1.0	4+3.0	12+5.0 +1E	1B+7.0	18	31			
SOUTHWEST		B	Nonq. IX	8	8	-	-	-	-	-	-	-	-	-	4.7	C.3	
KING		B	Nonq. XVI	2	2	-	-	-	-	-	-	-	-	-	-	7.9	C.4
KING		B	Nonq. IV	5	5	-	-	-	-	-	-	-	-	-	-	-	(incl. 3rd.000lb.)
KING TOTAL			7	7	-	-	-	-	-	-	-	-	-	-	-	-	
GRAND TOTALS TOTAL			749	650	8	12	46	33	19+1.0	2+3.0	12+5.0 +1E	1B+7.0	14	31			

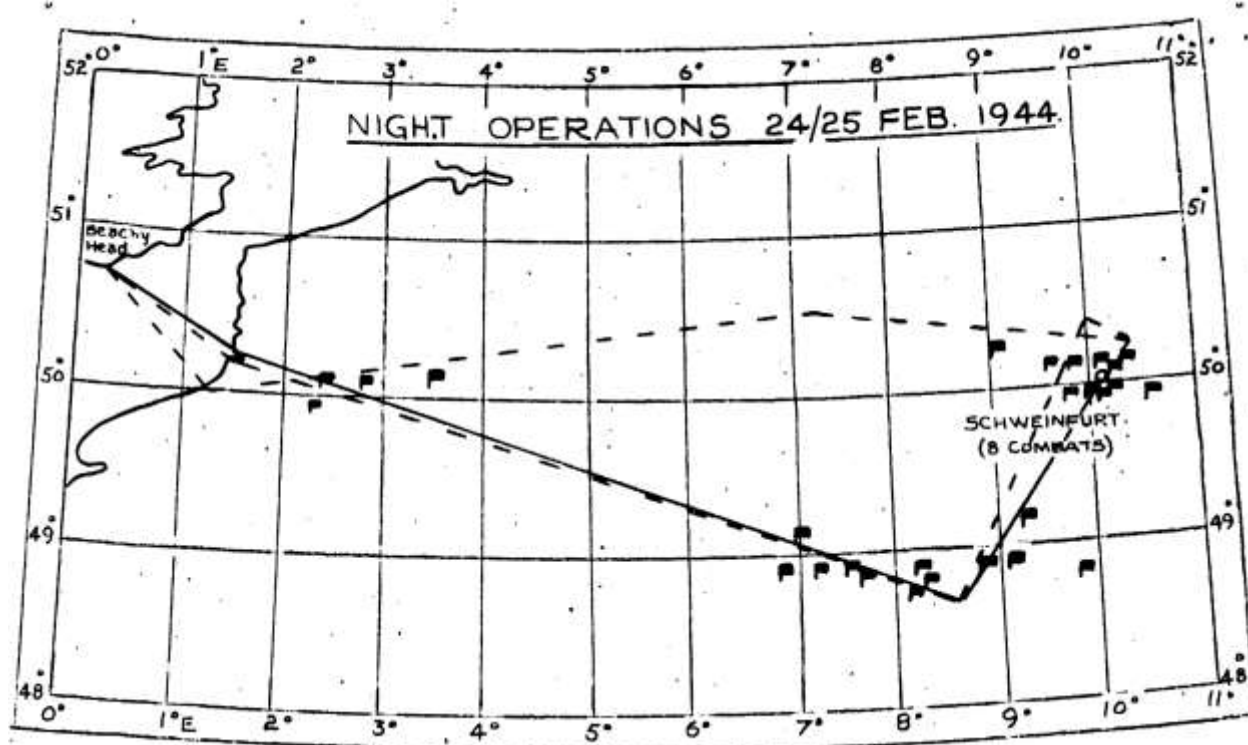
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UNIT	GROUP	MACHINE TYPE	SERIES	/C RECORDED		RECORDED		TOTAL	RECORDED	RECORDED	RECORDED	RECORDED	RECORDED	RECORDED	RECORDED
				PL. 1	PL. 2	PL. 1	PL. 2								
GRAND TOTALS			749	690	8	12	16	33	19+10	2+3.0	12+5.0	12+7.0	10	31	
VCLD	8	Msg. IX Msg. IV	1 1	1 1	-	-	-	-	-	-	-	-	-	-	1.8
VCLD TOTAL			2	2	-	-	-	-	-	-	-	-	-	-	
VCLD	3	Msg. IX	3	2	-	-	-	-	-	-	-	-	-	-	1.8
VCLD	7	Msg. IX	4	2	-	-	-	-	-	-	-	-	-	-	1.5
ST. WIND	8	Msg. IV	3	2	-	-	-	-	-	-	-	-	-	-	1.8
DEBAT	8	Msg. IX	3	3	-	-	-	-	-	-	-	-	-	-	2.7
BO DVC TOTAL			762	661	9	12	16	33	19+10	2+3.0	12+5.0	12+7.0	10	31	
WIND	1	Msg. IX	5	5	-	-	-	-	-	-	-	-	-	-	10 mins
WIND	3	Msg. IX	40	42	-	-	-	2	1	-	-	-	-	-	121 mins
WIND	6	Msg. IX	6	7	-	-	-	-	-	-	-	-	-	-	12 mins
WIND	3	Msg. IX	21	27	-	-	-	2	1	-	-	-	-	-	76 mins
WIND	3	Msg. IX	10	9	-	-	-	-	-	-	-	-	-	-	18 mins
WIND TOTAL			115	94	-	-	-	2	3	1	-	-	-	-	237 mins
ST. WIND	100	Msg.	12	6	-	-	-	1	-	-	-	-	-	-	
TOTAL			809	761	9	14	35	36	20+10	3+3.0	12+5.0	12+7.0	19	34	
WIND	3	Various	6	-	-	-	-	-	-	-	-	-	-	-	
WIND	100	Various	3	-	-	-	-	-	-	-	-	-	-	-	
TOTAL			14	-	-	-	-	-	-	-	-	-	-	-	

WIND
ST. WIND
D.D.S.S.

* Not included in total.

420

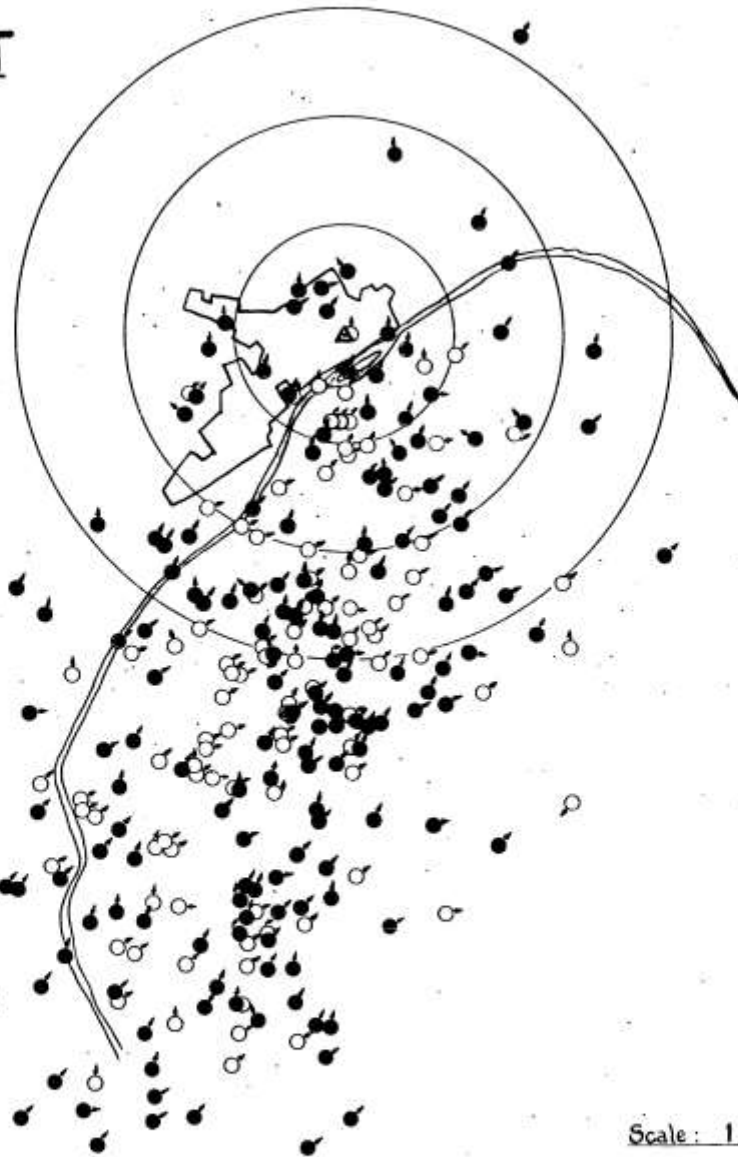
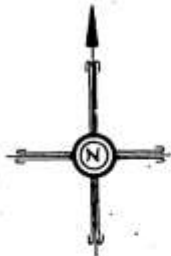


FINAL PLOT OF NIGHT PHOTOGRAPHS

430

TAKEN **24/25th** FEBRUARY 1944 TARGET: **SCHWEINFURT**
1ST PHASE

SECRET



Scale: 1 inch = 1 mile

Photographs taken with Bomberg		
	PFF marker aircraft	Main force aircraft
Plotted by ground detail	●	●
Plotted by force	○	○
<u>Plotted</u>	<u>By ground detail</u>	<u>By force</u>
Within target area	6	1
Outside target area	168	100
ORS/BC 371 B 8 4 44 Tracer: JY Ckd. Ref: N/R536		

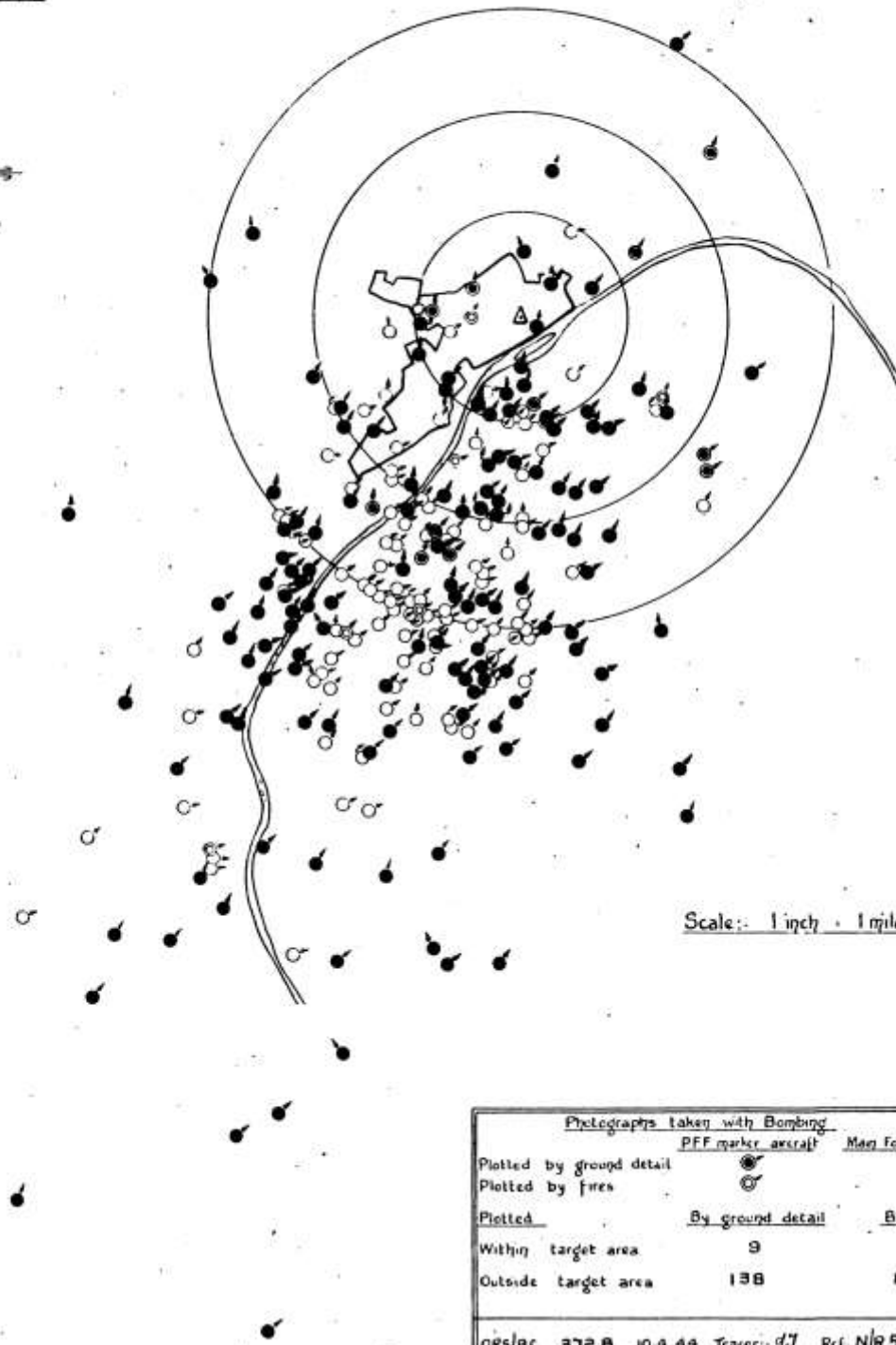
FINAL PLOT OF NIGHT PHOTOGRAPHS

TAKEN **24/25th** FEBRUARY 1944. TARGET: **SCHWEINFURT**

2ND PHASE

431

SECRET



Scale: 1 inch = 1 mile

Photographs taken with Bombing		
	PFF marker aircraft	Men forsc aircraft
Plotted by ground detail	●	●
Plotted by fires	⊙	⊙
<u>Plotted</u>	<u>By ground detail</u>	<u>By fires</u>
Within target area	9	6
Outside target area	138	103

ORS/BC 372 B 10.4.44 Tracer: JJ Ref N/R 536 Ltd

BOMBER COMMAND REPORT ON NIGHT OPERATIONS 501001

25/26th FEBRUARY 1944

AUGSBURG : Schweinfurt : Aachen : Saarbrücken : Mannheim : Minelaying, etc.

A. M.
25 MAY 1944
TIME

25 MAY 1944

A most successful two-pronged attack was delivered against Augsburg, devastated in a single night over 60% of the town, and damaging many vital factories, for loss of only 21 aircraft. The target was clearly identified in cloudless weather, very accurately marked. The second force, arriving 2½ hours later, found great burning, which they re-fuelled. The route across France and well into S. Germany again deceived the fighters, and few combats were reported.

Mosquitoes carried out diversionary raids on Saarbrücken, Schweinfurt and Aachen, and precision attacks against Aachen and airfields in the Low Countries. Mosquitoes and Stirlings laid 222 mines in the Sound and Kiel harbour, as a diversion to the main attack, and Wellingtons laid more mines in the Bay of Biscay. Mosquitoes carried out fighter patrols. 4 minelayers and one fighter were lost; but the minelayers destroyed 2 enemy aircraft, Lancasters on Augsburg claimed 2, and 2 more shot down by a minelaying Halifax.

WEATHER FORECAST

Basics:- Large amounts of strato-cumulus, base 1,500-3,000', tops 4-5,000'. Patches down to 1,000'. Little cloud above. No great change is expected for the night, and groups should be able to land all their aircraft. Local fog in night. Diversions on S. coast.

Germany:- N.E. of a line Texel-Mareburg: 10/10ths strato-cumulus, base 2,000', tops 8-10,000', with a few breaks (especially on Baltic coast) and patches of medium cloud above. S.W. of this line, fine weather, with moderate visibility. Augsburg: much strato-cumulus to S.E., then clear sky.

France:- Little cloud in N., much strato-cumulus in S. and S.W.

AUGSBURG

ATTACK

Route. Out: 1st attack Beechy Head - 50 00'N 01 15'E - 49 05'N
 47 50'N 11 00'E - Target.
 Out: 2nd attack 52 15'N 03 00'E - 50 40'N 05 50'E - 47 50'N
 47 50'N 11 00'E - Target.
 Home: both forces Target - 48 35'N 10 30'E - 48 20'N 07 20'E
 50'N 01 15'E - Beechy Head.

Route-marking On the way out, Y-aircraft were to drop red spot flares 3 miles from the W. tip of Lake Constance for the first force; and OBOE Mosquitoes were to drop red T.I. off track at Aachen for the second force. No route-markers were trapped on the homeward routes.

Method of Attack 1st attack This was planned as a NEWHAVEN with emergency marking. If there was less than 7/10ths cloud, and conditions appeared suitable for NEWHAVEN, the primary blind markers were to drop green T.I. and white flares (first bundle 30 seconds before the T.I., and the others at 10-second intervals after). Visual markers were to mark the exact aiming-point with mixed salvoes of reds and greens after positive visual identification, using the previous greens as guides. If unable to identify visually, they were to drop reds only on the centre of all T.I. It was emphasised that they were not to release T.I. on mixed greens or reds, or on built-up areas in the vicinity of the target. The backscatters were to aim bombs only at the centre of all T.I. Visual backscatters were to keep the aiming-point marked with reds, aimed at the centre of mixed reds

/and green salvoes

and green salvos, or, if these could not be identified, at the centre of reds a 2-second overshoot. These aircraft were not to attack before zero hour. Supporters were to bomb on H2S, a good D.R. or the centre of T.I. Main force were to aim at the mixed salvos, or, if these could not be seen, at the centre reds.

7. If, however, there was more than 7/10ths cloud, the target was to be sky marked. Primary blind markers were to drop green T.I. and release point flares (G/R stars), but hold their white flares. If their H2S was u/s, they were to hold their T.I. and bomb with the supporters. Visual markers were to drop R/P flares on H2S, if unable to centre on greens. Blind backers-up were also to drop R/P flares blindly. These aircraft were to hold their markers if their H2S was u/s, and drop bombs only at R/P flares. Supporters were to bomb blindly or, if their H2S was visually, on a good D.R., or on R/P flares if already down. Main force crews were to aim at the centre of R/P flares.

8. 2nd attack This was planned as a PARALLEL with emergency sky-marking. Primary blind markers were to mark the aiming-point with green T.I. and the release point with R/P flares (G/R stars). If their H2S was u/s, they were to hold their T.I. and flares and join the supporters. Blind backers-up were to keep the aiming-point marked throughout the attack with red T.I. and R/P flares. If their H2S was u/s, they were to hold their flares and join the visual backers-up. The latter were to aim reds at the centre of all visible T.I., with a 2-second overshoot. If cloud obscured the T.I., they were to hold their own T.I. and bomb on H2S or the R/P flares. Supporters were to bomb on H2S or, if this was u/s, visually, on a good D.R. or on any markers that were already down. Main force crews were to aim at the centre of all reds or, if the cloud was thick, at the centre of R/P flares. All aircraft, in both attacks, were to aim at R/P flares on a heading of 360°M., with bomb-sights set for true height and zero wind.

9. Timing Zero hour: (a) 2245 (b) 0115
Duration of attack: (a) 2233-2251 (b) 0113-0121

Primary blind markers:	(a) 15 at zero-6	(b) 12 at zero-2
Visual markers	(a) 6 at zero-4	-
Blind backers-up	(a) 6 from zero to zero+6	(b) 7 from zero to zero+6
Visual backers-up	(a) 12 from zero to zero+6	(b) 13 from zero to zero+6
Supporters	47 at zero-6	46 at zero-2
Main force	102 from zero to zero+3	100 from zero to zero+3
	103 from zero+3 to zero+6	103 from zero+3 to zero+6

(14 ABC aircraft to be spread evenly through both)

10. Diversions One Mosquito was to drop one spoof route-marker (yellow T.I.) Saarbrücken on H2S, and then attack Schweinfurt with H.E. and red T.I. 4 Mosquitoes were to drop one red T.I. 30 miles E. of Saarbrücken, and then attack Schweinfurt with H.E. and green T.I. These 5 aircraft were to drop 4 bundles per minute of WINDOW beyond Saarbrücken. 5 Mosquitoes were to drop 4,000 lb. bombs on Saarbrücken, aiming at yellow T.I. or bombing visually. If unable to identify this target, they were to attack Mannheim; and in either case, they were to fly from Saarbrücken to Mannheim dropping WINDOW. 17 OBOE Mosquitoes were to attack aerodromes in the Low Countries. 6 Mosquitoes were to attack Augsburg at zero-10, dropping WINDOW in the target area and 2 more at zero+14.

11. WINDOW WINDOW was to be dropped at the rate of 2 bundles per minute within 50 miles of the target, and one per minute for the rest of both routes.

12. SORTIES

	1st attack	2nd attack	Total
(a) No. of aircraft despatched	290	304	594
(b) No. of aircraft reporting attack on primary area	248	259	507 (85.3%)
(c) No. of aircraft reporting attack on alternative area	9	5	14 (2.4%)
(d) No. of abortive sorties	21	31	52 (8.8%)
(e) No. of aircraft missing	12 (4.1%)	9 (3.0%)	21 (3.5%)

EXPERIENCED

bases:- 10/10ths strato-cumulus, base 1,500-2,500', tops 4,500-5,500'.
 patches below 1,000'. Light showers S. of Hamber. Light to moderate icing
 Moderate to poor visibility.

Route:- 10/10ths str to-cumulus, tops 5-6,000', as far as a line Rheims-
 Thence little or no cloud. Wide areas covered with snow.

Target:- No cloud, haze. Good visibility. No moon.

Winds:- At 18-23,000': 050°/15-20 m.p.h. at enemy coast, becoming 040°/20-
 at target, and gradually backing on return route to 330°/20 m.p.h. at enemy
 Similar for second wave; wind veered from 330° at enemy coast to 040° at

PHOTOGRAPHIC STATISTICS

1st attack

No. of photographs plotted in target area	(ground detail ... 101)	
	(fire-tracks 27)	..... 128
" " " " off " "	(ground detail ... 74)	
	(fire-tracks 18)	..... 92
No. of aircraft estimated to have bombed in target area		
	(Max	144
	(Min	128
	(Mean	139*

(* 248 aircraft reported attack).

2nd attack

No. of photographs plotted in target area	(ground detail ... 22)	
	(fire-tracks 39)	..... 61
No. of photographs plotted off " "	(ground detail ... 117)	
	(fire-tracks 44)	..... 161
No. of aircraft estimated to have bombed in target area		
	(Max	71
	(Min	61
	(Mean	68*

(* 25) aircraft reported attack).

No. of aircraft estimated to have bombed within 3 miles of aiming-point:

<u>1st attack</u>	(Max	231
	(Min	205
	(Mean	224
<u>2nd attack</u>	(Max	240
	(Min	206
	(Mean	231

NARRATIVE OF ATTACK

Early arrivals easily identified the snow-covered town and the railway and
 junction by flarelight. The markers achieved an excellent concentration, with
 little undershooting. Large fires quickly developed. The second force found the
 covered with smoke rising to a height of 15,000', but the outline of the built-up
 was still clearly visible by the light of the fires. A further concentration of
 developed towards the E. and N.E. of the town. Mosquitoes attacking an hour
 at the close of the raid reported an apparently solid mass of fires.

RECONNAISSANCE

Photographs obtained nearly 3 weeks after the raid showed that the greater
 of the old imperial city of Augsburg had been devastated. Fires had spread
 checked through the closely built-up area and beyond the walls and moat, which once
 stained the old city, into the modern industrial area to the N. and E. The suburb
 Lechhausen, N.W. of Augsburg, across the river Lech, also suffered heavily, and it

/is estimated that

is estimated that, apart from the industrial area, itself ravaged by fire, no 60% of the fully built-up property of the town had been destroyed or severely damaged.

17. In the industrial region between the river and the city proper, lie the extensive workshops of the Maschinenfabrik Augsburg-Munich A.G., the largest producers of Diesel engines in Germany. Besides the original plant and the f. Reidingen Machine Works, an extension of the M.A.N. Works, are a neighbouring Mill and 2 Cotton Mills, which have probably been taken over by the M.A.N. firm for war production. Nearly the entire plant was destroyed, some of the largest workshops being completely gutted. The important aircraft components works of Messerschmittner also suffered heavily. Most of the factories E. of the city were concerned with the textile industry, particularly cotton spinning and weaving. Most all were destroyed or severely damaged, including the extensive mills of the Kammgarnspinnerei, Kohn und Arnold, Neue Augsburgische Kattunfabrik and the 4 prae. Mechanische Weberei Fichtelbach. Other factories affected include bleaching and dyeing works, engineering firms and a manufacturer of rail switches.

18. A transformer station, 2 tramway depots, and the town slaughter house and cattle market were very severely damaged. The Rathaus, the Stock Exchange, the Courts, the historic Fuggerhaus and the local Government Offices were destroyed. The Cathedral, standing in a devastated area, remained intact apart from minor damage.

ALTERNATIVE TARGETS

19. The aircraft bombed alternative targets, in the areas of : Dieppe (3), Bobinger, Stuttgart, Abbeville, Hasselt, Gemaches, Texel, Morhange, Höchstädt, and Bu.

ENEMY DEFENCES

20. Ground Defences The target guns fired a moderate heavy flak barrage up to 25,000' during both attacks, with light flak to 16-18,000'. As many as 100 searchlights exposed, but they were poorly controlled and formed few cones. In the second attack, they were badly hampered by smoke and by the heavy fires. Little ground opposition was reported en route, except by the second force on the way out, when defences of Rotterdam, Saarbrücken, Karlsruhe, Munich and, in particular, Friedrichshafen, were active. One aircraft was lost to flak on each of the outward routes and one over the target during the second attack.

21. Fighters The fighters ignored the minelaying diversion and all groups were concentrated against the main bomber forces; but the route chosen for the first force passing through France and well south into Germany, puzzled the controllers for a third successive occasion, and caused them to aim at intercepting the stream at the target rather than en route. Neither force experienced much fighter opposition, though the first unluckily met a force which had been sent to assemble near Metz, lost 5 aircraft in combat over France. When a second raid appeared imminent, fighters were ordered to land and refuel in order to meet the later raiders. At no time were many fighters seen over the target. Apart from the 5 losses over France, the first force lost another aircraft to fighters over Augsburg; and 3 of the second force were in combat, 2 between Trier and Lake Constance and one shortly after leaving the target. Lancasters of 5 Group shot down a Me.210 and an unidentified single-engined aircraft.

CASUALTIES

	1st Attack	2nd Attack	TOTAL
22. No. of aircraft missing	12 (4.1)	9 (3.0)	21 (3.5)
No. of aircraft damaged	(flak 7) (fighter.. 8) (n/c act. 2)	1/ (flak 4) 8 (fi. 0) (fi. 8) (n/c act.4) (n/c act.6)	25

Observations suggest that the first force lost one aircraft to flak, 6 to fighters and 4 in collisions over the Channel on the outward route; and that the second force lost 2 to flak and 3 to fighters. In addition, 2 Lancasters of the first force were wrecked in landing accidents. Very few aircraft were damaged by flak of fighters, and only one seriously.

SCHWEINFURT

5 Mosquitoes (including one Y-aircraft) carried out a diversionary attack on Schweinfurt, after dropping spoof route-markers. Large dummy fires were started by Germans outside the town. All the Mosquitoes returned safely.

SAARBRUCKEN

5 Mosquitoes were sent to attack Saarbrücken, with Mannheim as an alternative if the primary could not be identified. The marker aircraft claimed to have hit Saarbrücken, but its T.I. fell 15 miles from the town and the other 4 aircraft hit Mannheim. All the aircraft dropped 4,000 lb. bombs. No damage or casualties were sustained.

AACHEN

5 OBOE Mosquitoes (3 Mk.I, 1 Mk.II PENWIPER and 1 Mk.II FOUNTAIN PEN) were engaged on a harassing attack against Aachen. 2 Mk.I aircraft and the PENWIPER successfully controlled runs; the remaining Mk.I experienced OBOE failure and missed the primary on D.R.; and the FOUNTAIN PEN jettisoned over the North Sea, because of GEE failure. No damage or casualties were sustained.

ENEMY AIRFIELDS

15 OBOE Mosquitoes were sent against enemy airfields in the Low Countries. Successfully controlled runs were made by 2 Mk.I. aircraft on Doelen, 2 Mk.I on Melle, 3 Mk.I on Gilze Rijen, 2 Mk.II FOUNTAIN PEN on Twente and 1 Mk.I on St.Trendelenburg. Two PENWIPERS attacked their targets on D.R., at Venlo and St.Trendelenburg respectively; one FOUNTAIN PEN bombed Texel and a PENWIPER Krefeld on the failure of their precision runs; and one PENWIPER (on Venlo) abandoned its task because of engine trouble and returned undamaged.

MINE LAYING

82 Halifaxes were sent to lay mines in Kiel harbour as a diversion to the main attack on Augsburg. 63 completed their task in clear weather, laying 138 mines. At the same time, 23 Stirlings and Halifaxes, out of a force of 39, laid 79 mines in the Baltic; and 5 Wellingtons laid 10 mines off St.Nazaire. 3 Halifaxes were lost on Kiel, one Stirling on The Sound; 2 aircraft were observed shot down over S.Denmark, one fighter at Kolding and the other near Vejle to an unknown cause. The fate of the other 2 is unknown. Several fighters were seen off the Frisians and over the Baltic, mostly Ju.88s, and one Halifax of 4 Group shot down a Ju.88 and a Me.109. A Stirling flew into the ground on return and was wrecked.

FIGHTER OPERATIONS

10 Mosquitoes of 100 Group were sent on Serrate patrols, shooting down one Me.110 but losing one aircraft themselves. At the same time, 4/8 Mosquitoes of 2 Group attacked enemy airfields, and fighters of 100 Group destroyed one Me.110 and shot down another.

R.
26342/1/ORS4
May, 1944

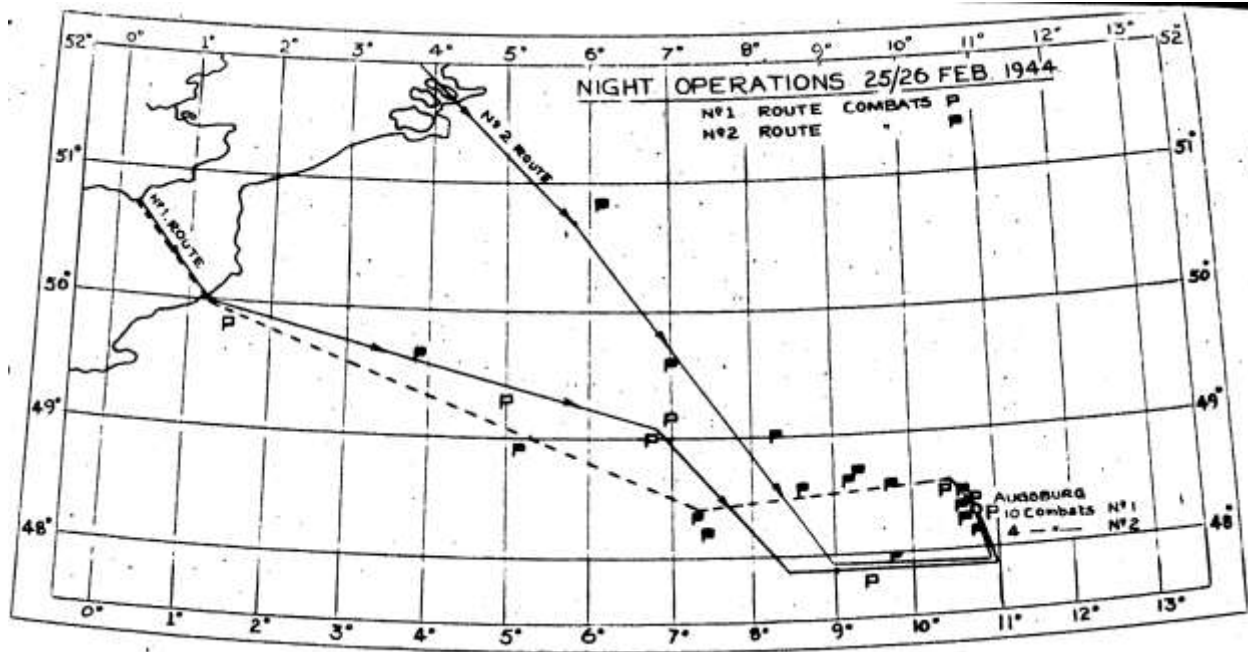
TASK	GROUP	AIRCRAFT TYPE	SORTIES	A/C REPORTING ATTACK ON		AGGRESSIVE SORTIES		MISSED	FLAK	FIGHTER	MISC. IN FLIGHT	OTHER GUNNERS	REPAIRS	TOTAL	NO. TONS
				PHIL. AREA	ALY. AREA	OVER E.T.	NOT OVER E.T.								
1st. Attack	8th	Lanc. III	39	36	1	-	1	1	2	1+1.0	-	-	3	1	Both attacks 1,033.9 79 Heavy Bombs 280,000lb. 350,000lb.
		Bomb. IV	6	5	-	-	-	-	-	-	-	-	-	-	
		Lanc. III	17	15	-	-	-	2	-	-	-	-	-	-	
		Lanc. I	5	5	-	-	-	-	-	-	-	-	-	-	
		Supp.	20	19	-	-	-	2	-	-	-	-	-	-	
		Lanc. I	37	32	1	-	1	3	-	1B	-	1B	3	3	
		Lanc. III	67	55	2	2	8	2	2+1.0	1.0	-	-	-	4	
		Lanc. I	26	24	-	-	-	2	-	-	-	-	-	1	
		Lanc. III	73	60	5	-	3	4	2	3.0	-	1B	6	5	
		1st. Attack Total			290	248	9	3	18	12	6+1.0	2+5.0	-	23		13	16
2nd. Attack	8th	Lanc. III	19	16	1	-	2	-	-	-	-	-	-	-	435
		Bomb. III	15	11	-	-	2	-	-	-	-	1.0	-	-	
		Bomb. IX	1	1	-	-	-	-	-	-	-	-	-	-	
		Bomb. IV	3	3	-	-	-	-	-	-	-	-	-	-	
		Bomb. II	4	3	-	-	1	-	-	-	-	-	-	-	
		Lanc. III	12	12	-	-	-	-	-	-	-	-	-	-	
		Lanc. I	2	2	-	-	-	-	-	-	-	-	-	-	
		Supp.	28	23	1	-	2	2	-	-	-	-	-	-	
		Lanc. I	5	4	-	-	1	-	-	-	-	-	-	-	
		Lanc. III	2	2	-	-	-	-	-	-	-	-	-	-	
		Lanc. I	13	11	-	-	2	-	-	-	-	-	-	3	
		Lanc. III	7	4	1	-	2	-	-	-	-	-	-	1	
		Lanc. II	29	28	-	-	1	-	1+1.0	-	-	-	-	5	
		Bomb. III	62	49	1	2	9	1	2	-	1	1.0	1	1	
		Lanc. I	10	10	-	-	-	-	-	-	-	-	-	-	
Lanc. III	29	28	-	-	1	-	-	-	-	-	-	-			
Bomb. III	66	53	1	-	6	4	-	-	-	-	-	1			
Lanc. II	21	19	-	-	-	2	-	-	-	-	-	-	4		
2nd. Attack Total			324	259	5	2	29	9	3+1.0	-	2	2.0	4	16	

TASK	GROUP	AIRCRAFT TYPE	SORTIES	A/C REPORTING ATTACK ON		AGGRESSIVE SORTIES		MISSED	FLAK	FIGHTER	MISC. IN FLIGHT	OTHER GUNNERS	REPAIRS	TOTAL	NO. TONS
				PHIL. AREA	ALY. AREA	OVER E.T.	NOT OVER E.T.								
TOTAL			594	507	14	5	47	21	9+2.0	2+5.0	-	28+2.0	17	30	
SCHLESWIG	8th	Bomb. XVI	1	1	-	-	-	-	-	-	-	-	-	-	2.0
		Bomb. IX	2	2	-	-	-	-	-	-	-	-	-	-	
		Bomb. IV	3	2	-	-	-	-	-	-	-	-	-	-	
SCHLESWIG TOTAL			6	5	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS	8th	Bomb. IX	5	5	-	-	-	-	-	-	-	-	-	-	2.7
		Bomb. IV	1	1	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS TOTAL			6	6	-	-	-	-	-	-	-	-	-	-	
ALY. HUNTERS	8th	Bomb. XVI	2	2	-	-	-	-	-	-	-	-	-	-	7.1
		Bomb. IV	2	2	-	-	-	-	-	-	-	-	-	-	
ALY. HUNTERS TOTAL			4	4	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS	8th	Bomb. IX	1	1	-	-	-	-	-	-	-	-	-	-	1.8
		Bomb. IV	2	2	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS TOTAL			3	3	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS	8th	Bomb. IX	3	1	-	-	-	-	-	-	-	-	-	-	0.9
		Bomb. IV	2	2	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS TOTAL			5	3	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS	8th	Bomb. IV	1	1	-	-	-	-	-	-	-	-	-	-	1.8
		Bomb. IX	1	1	-	-	-	-	-	-	-	-	-	-	
ST. THOMAS TOTAL			2	2	-	-	-	-	-	-	-	-	-	-	
TOTAL			624	534	16	5	47	21	9+2.0	2+5.0	-	28+2.0	17	30	

TARGET	GROUP	INCIDENT TYPE	COPIES	NO. REPORTED		NO. BOMBS		NO. OF	NO. OF		NO. OF	NO. OF	NO. OF	RESULTS
				PREL. RE.	ACT. RE.	OVER 2 T.	OVER 7 T.		PLANE	FLIGHT					UNDER GUNNING	NO. OF	NO. OF
BOMBING TOTAL			624	544	16	6	67	24	9+2.0	2+2.0 +1P	2	22+2.0	17	30
MIDLANDS ST. PETERS AIRG.	Bell. 5	5	5	-	-	-	-	-	-	-	-	-	-	10 mins
		5	5	-	-	-	-	-	-	-	-	-	-	10 mins
		5	5	-	-	-	-	-	-	-	-	-	-	10 mins
		58	20	-	4	5	1	2	-	-	-	2	-	48 mins
MIDLANDS ST. PETERS AIRG.	Bell. 5	58	25	-	9	2	1	-	-	-	-	-	-	50 mins
		87	63	-	13	6	3	3	-	-	-	2	2	138 mins
THE STAIRS	Bell. 5	6	5	-	1	-	-	-	3	-	-	-	-	10 mins
		33	23	-	4	2	1	1	-	-	-	-	-	69 mins
THE STAIRS TOTAL			39	28	-	5	5	1	4	-	-	13+18	2	79 mins
MIDLANDS TOTAL			131	96	-	18	13	4	7	-	-	13+15	4	227 mins
SEARCHED	100	Various	10	4	-	1	4	1	-	-	1	1E	-	-
TOTAL			765	634	16	25	61	26	16+2.0	2+5.0 +1P	3	43+15 +2.0	21	32
SPECIAL OP.	100	Various	5	-	-	-	-	-	-	-	-	-	-	-
LEADS	1170	Various	5	5	-	-	-	-	-	-	-	-	-	-

SCR/ST.
0.2.3.4.

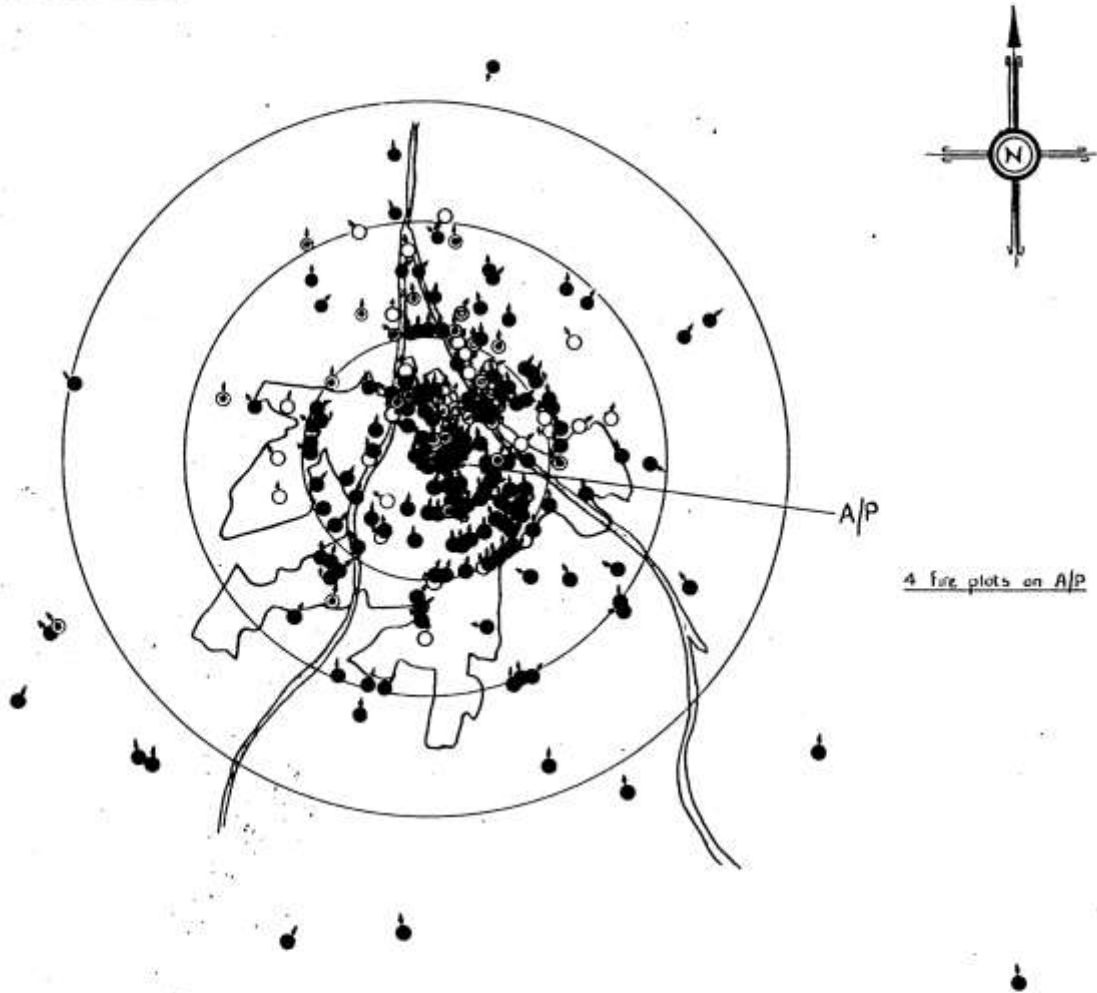
POINTS TO:- TROUSERS; GRENADERS; BIKERS; GLETS; CHIFFERS.



FINAL PLOT OF NIGHT PHOTOGRAPHS
TAKEN 25/26 FEBRUARY 1944 TARGET: AUGSBURG
1ST ATTACK

438

SECRET



ORS/BC 399B
 27-4-44 J.D.
 Ref NGR 517 Chd. J.

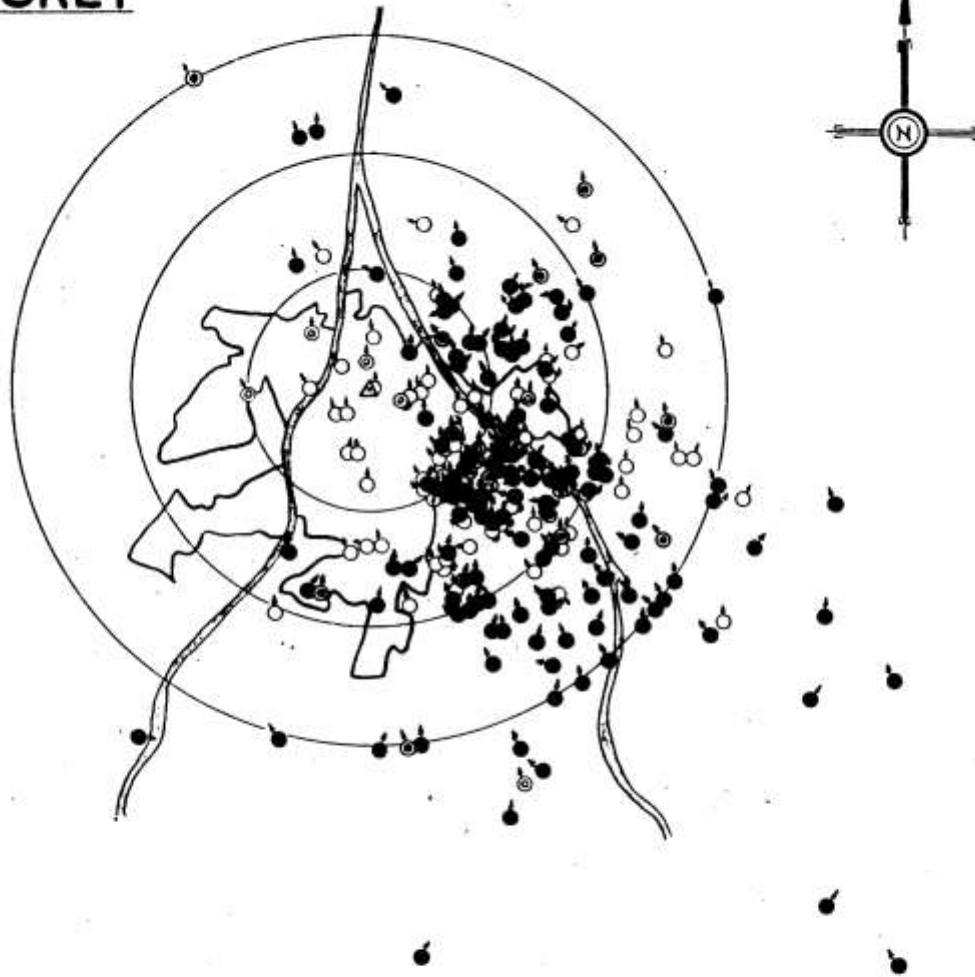
Scale: 1 inch = 1 mile

Photographs taken with Bombing		
	PFF marker A/C	Main Force A/C
Plotted by ground detail	●	●
Plotted by fires	⊙	○
Plotted	By ground detail	By fires
Within target area	101	27
Outside target area	74	18

FINAL PLOT OF NIGHT PHOTOGRAPHS
TAKEN 25/26 FEBRUARY 1944 TARGET: AUGSBURG.
2ND ATTACK

439

SECRET



Scale: 1 mile = 1 inch

ORS/PC 4018
 20 44 37
 Ref: NRS 551120

Photographs taken with Bombing		
	PFF marker A/C	Main Force A/C
Plotted by ground detail	⊙	●
Plotted by fires	⊖	○
Plotted	By ground detail	By fires
Within target area	22	39
Outside target area	117	44

HQST SECRET

TIME
NIGHT BOMBING REPORT NO. 538
COPY NO. 16
17 MAY 1944

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

440

28/29th FEBRUARY, 1944.

Leaflets : Met. Recon

RY

8 Wellingtons were despatched to scatter leaflets over Northern France. Completed their task. One Mosquito carried out a met. reconnaissance flight. Aircraft was lost.

WEATHER FORECAST

Bases:- Little cloud except in East Anglia. Local snow showers. Many bases will have 1,500 yards visibility because of smoke.

Germany:- Variable amounts of medium cloud, and much strato-cumulus.

France:- Variable amounts of strato-cumulus; base below 1,000' over W. in occasional precipitation.

Germany:- 10/10ths strato-cumulus and medium cloud in several layers between 10,000' and 15,000'.

RESULTS

	<u>Leaflets</u>	<u>Met. Recon</u>
(a) No. of aircraft despatched.....	8	1
(b) No. of aircraft reaching primary area.....	6	1
(c) No. of abortive sorties { tech. defect....1 (nav. error....1).....	2	0
(d) No. of aircraft missing.....	0	0

WEATHER EXPERIENCED

N. France:- 10/10ths cloud, tops 9-17,000'. Hazy.

DEFENCES

No defences were encountered apart from a little flak at Le Havre.

REMARKS

None.

1/57
A. 26342/3. CRS4
17 May 1944

TYPE	GROUP	ALCRAFT TYPE	SORTING	A/C REPORTING		DESCRIPTIVE		MISS-ING	PASSENGERS	REASON IN FLIGHT	OTHER CAUSES	TOTAL	
				FRONT AREA	ALT. AREA	DOWN E.T.	NOT OVER E.T.					RECOVERED	NOT RECOVERED
EMBASSY M. PRINCE	92	Well. III Well. X	2 6	- 6	- -	2 -	- -	- -	- -	- -	- -	- -	- -
LEAFY TOTAL			8	6	-	2	-	-	-	-	-	-	-
MST. 19000	8	Mag.	1	1	-	-	-	-	-	-	-	-	-
TOTAL			9	7	-	2	-	-	-	-	-	-	-

SCJ/JE
C.R.S.3.

BOMBER COMMAND REPORT ON NIGHT OPERATIONS

29th FEBRUARY/1st MARCH, 1944.

Dusseldorf : Sottevast : Leaflets.

PRIMARY

Dusseldorf. 15 Mosquitoes (2 OBOE Mk.I, 1 OBOE Mk.II PENWIPER, 1 Mk.II FOUNTAIN PEN and 11 non-OBOE) were despatched against Dusseldorf. Only the PENWIPER of the OBOE aircraft made a successfully controlled run, but its T.I. was not seen by none of the other crews, 13 of whom attacked the primary on D.R. The remaining aircraft was unable to release its bombs over the target. 6 100 lb. bombs were included in the load dropped. All the aircraft returned unharmed.

Sottevast. 1 Mk.II FOUNTAIN PEN Mosquito was sent against the military construction at Sottevast, but abandoned its task over the target because of OBOE failure.

Leaflets. 20 Whitleys and Wellingtons from Training Groups were sent to scatter leaflets over Northern and Central France. 18 completed their task. 2 aircraft was lost.

WEATHER FORECAST

Midnight frontal positions:- (1) warm from N. Denmark - Spitz Head - S.W. Iceland (2) cold from N. Denmark - S. Scotland - N. Ireland.

Bases:- Generally fit, with well broken cloud and good visibility. Much cold rear warm front. Poor visibility in S.E. all night.

Germany:- Little cloud in N.W. Broken strato-cumulus E. of 09° E. and W. 14° E., over N. Germany. Much strato-cumulus in E. and S. Moderate visibility.

France:- Little cloud in N. and N.W. Well broken strato-cumulus in Central and Southern Areas.

SORTIES

	<u>Bombing</u>	<u>Leaflets</u>
(a) No. of aircraft despatched.....	15	20
(b) No. of a/c reporting attack on primary target.....	4	18
(c) No. of abortive sorties (tech. defect.....)	3	1
(d) No. of aircraft missing.....	0	1

OTHER EXPERIENCED

Bases:- 1, 4 and 5 Groups had much thick smoke haze at first, but this cleared a little during the night. 6 Group fit all night. Increasing strato-cumulus at 1,500'; many low patches in extreme S. Moderate visibility.

Dusseldorf:- 10/10ths strato-cumulus, tops 5-10,000'. Thin patchy cirrus to 30,000'.

Sottevast:- 5/10ths strato-cumulus, tops 6,000'.

N.France:- Small amounts of strato-cumulus; nil in many areas.

REPORT	GROUP	CIRCUIT TYPE	COURTESY	% INCORPORATED		INCORPORATED		ISSUED	REMARKS				TOTAL	H.E. Inc.
				REL.	REL.	OVER	OVER		IN	IN	IN	IN		
DUPLICATE	B	Group IX	4	3	-	1	-	-	-	-	-	-	-	17.1 0.1
		Group XVI	5	5	-	-	-	-	-	-	-	-	-	
		Group IV	8	8	-	-	-	-	-	-	-	-	-	
DUPLICATE TOTAL			15	14	-	1	-	-	-	-	-	-	-	-
SOTTLY	B	Group IX	1	-	-	1	-	-	-	-	-	-	-	-
BORING TOTAL			16	14	-	2	-	-	-	-	-	-	-	-
REPLACES H. FRANKS	91	Well. Ia	4	4	-	-	-	-	-	-	-	-	-	-
		Well. X	1	1	-	-	-	-	-	-	-	-	-	-
		Whit.	9	8	-	-	-	1	-	-	-	-	-	-
92	Well. III	1	1	-	-	-	-	-	-	-	-	-	-	-
	Well. V	5	4	-	-	-	-	-	-	-	-	-	-	-
REPLACES TOTAL			20	18	-	1	1	-	-	-	-	-	-	-
TOTAL			36	32	-	2	1	1	-	-	-	-	-	-

BOB/PL.
C.R.S.S.

91 GROUP TO: OUYERON; ST. QUENTIN; C. GRAI; DOUAI; ARRAS; LA FLECHE; LAUREN; ALCONON;

92 GROUP TO: PARIS;