

P. M.
MST SECRET
13 JUN 1942

111
166486
NIGHT BATT. REPORT NO. 58
13 JUN 1942
COPY NO. /6

BOEGER COMMAND REPORT ON NIGHT OPERATIONS 2/3rd M.V. 1942

Meteorological Advice Submitted to the Command

1. 0920 hours. The estimated position of fronts at midnight is (a) cold front, N. Scotland - N. Holland then along the parallel 52°N to 10°E. (b) feeble cold front, Isle of Wight - south of Paris then E.S.E.

Home Bases:- variable amounts of cloud, probably showers

N. Germany:- much low and medium cloud.

S. Germany:- variable amounts of layer cloud.

N.W. and W. France:- small amounts of cloud; moderate visibility.
- 1245 hours. Baltic Area:- Between Kiel and Stettin broken low cloud with some convection cloud expected.

From Stettin to Danzig increasing amounts of low cloud with rain at times and base of cloud below 1,000 ft. in rain.
- 1715 hours. Home Bases:- 2, 3 and 5 Groups should be fit for an early start. 5 Group will remain fit until midnight. 2 and 3 Groups will probably have difficulties with North Sea stratus which will spread inland in East Anglia but not west of 0°. 5 Group feel certain of diversions along South Coast and in S.W. England. 6 and 7 Groups will have visibility difficulties in the early hours of the morning. 4 Group are not expected to have visibility troubles or low stratus. 1 Group's inland bases should be fit although there may be slight visibility troubles from 0300 hours onwards.

Baltic Area:- Patchy strato-cumulus and much medium cloud as far east as 15°E, beyond which there are risks of low cloud with rain not clearing, and also low stratus forming over cold water.

Executive Orders

2. The weather conditions over the target areas on the Continent were expected to be unfit for bombing operations, but conditions were very favourable for mining. Strong forces of aircraft from 3 and 5 Groups were detailed to fill up the minefields in the Baltic Plan and to add fresh consignments to those on the west coast of France.

Leaflet dropping operations over Rennes by a small force of freshmen were also ordered.

Sorties

3. 107 sorties were made. For details of the operations, see attached table. In the table only the results of the minelaying are shown and a sortie is shown as abortive even if the bombs which were also carried by most minelayers were dropped.

Weather Experienced

4. Bases:- Little cloud, but patches of low stratus in eastern England; visibility moderate or good.

Bay of Biscay and Route:- Little or no cloud; patches of mist, fog or low stratus over N.W. France, otherwise good visibility.

.../ North Sea

North Sea:- 8 - 10/10 stratus, base 500 - 600 ft, top 1500 - 1800 ft, with occasional breaks.

South Denmark:- Little low cloud but much medium cloud at 8000 - 9000 ft; visibility good.

Baltic:- As for St Denmark in the extreme west with cloud increasing eastwards to 8 - 10/10, base 300 - 600 ft., tops 14,000 - 18,000 ft. with rain and poor visibility.

Abortive Sorties

5. 15 sorties were abortive. 11 of these were due to inability to obtain a pinpoint owing to haze, 1 to a technical defect, 1 to the aircraft striking a cable, believed H.T., when flying at 100 ft. over enemy territory, and in 2 cases the reason was not given.

Casualties

6.

	Group	Type	Squadron	Category				
				Minor	A	MC	B	E
Missing	5	Manchester	106					2
Damaged by flak	3	Stirling	15	1				
	3	Stirling	159	2				
	3	Stirling	218			1		
	5	Manchester	105	1				
	5	Lancaster	44	1				
Damaged by Enemy Fighter	3	Wellington III	419					1
Damaged, not by enemy action	5	Hampden	408			1		

Summary

7. 96 aircraft were despatched on minelaying sorties over a wide area. Reasonably good weather conditions were met with in all areas except the eastern part of the North German Baltic Coast, where conditions were very poor, and the West Coast of Brittany where haze prevented some crews from pinpointing. In all 69 aircraft laid their mines in the allotted positions and 11 in alternative areas.

In addition to their mines a number of these aircraft carried a small number of 500 lb. or 250 G.P. bombs. 6 aircraft used these against ships, 2 against aerodromes, 2 against flak positions, and 1 against a cluster of searchlights, all the land targets being in Brittany.

2 of our aircraft are missing from this operation. Light flak was encountered at many points on the West Coast of France between Lorient and St. Nazaire, at Sylt and along the East Coast of Denmark. There was heavy flak also from Guernsey, the Ile de Re and Lorient. 6 aircraft report flak damage. There were two attacks by enemy aircraft in one of which our aircraft was damaged.

11 freshmen were despatched to drop leaflets over Rennes. 10 of these did so successfully. The remaining one was unable to locate the target and dropped his leaflets in an unidentified position over France.

2/3rd May, 1942																
Target	Group	Aircraft despatched	Interceptions		Casualties			No. of A/O claiming to have attacked with bombing, showing		No. of A/O claiming to have bombed Primary taking photos		A/O failing to attack Primary			Did not reach E.T.	
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause Unknown	Target	Target Area	Ground Details	Primary Target	Points within 5 miles of Target	Bombing other Target	Abortive		Bombing other Target
MINELAYING	3	Well.III 43	2	6	1 Cat.B.			27				4	8		1	3
		Stirling 12			1 Cat.AC 3 Minor			11					1			
	5	Hamden 12 *			1 Cat.AC			10								2
		Manchester B *		1	1 Minor		2 missing	4							2	
		Lancaster 21		2	1 Minor			17				1			3	
LEAFLETS	5	Hamden 2**					2									
		Manchester 9**					8				1					

107 2 9 1 Cat.B 1 Cat.AC 2 missing 79

1 Cat.AC
5 minor

Total Abortive 15

112

* not fitted T.R. 1335

+ Freshmen

SECRET

P.W

13 JUN 1942

NIGHT RAIL REPORT NO. 52
13 JUN 1942

COPY NO. 16

No. 166486

113

BOMBER COMMAND REPORT ON NIGHT OPERATIONS 3/4TH MAY, 1942.

Meteorological Advice Submitted to the Command

1. 0920 hours:- The estimated midnight position of the cold front is S.W. Scotland - Lincolnshire - Zuyder Zee - 52 $\frac{1}{2}$ ^oN 10^o E. - Danzig.
- Home Bases:- The belt of precipitation over the British Isles associated with the cold front is expected to be narrow. North of the front variable amounts of convection cloud are probable. South of the front variable amounts of medium cloud with local visibility troubles, mainly due to smoke, are expected.
- Target Areas:- Over Germany north of the front there should be little cloud and very good visibility. South of the front there will be much low and medium cloud, and in South Germany and Austria variable cloud. The weather over France will be fine with moderate visibility.
- 1305 hours. There is a doubt whether the cold front will be south of Hamburg in time for the cloud there to have cleared by 0200 hours. In the air mass behind the front there is strato-cumulus cloud and such cloud may be found over Hamburg after the front has gone over.
- 1715 hours. Home Bases:- Local visibility troubles in the South and East ahead of the front, which is expected to have passed 4 Group early, moving South slowly. There will be no serious trouble on the front or behind it, where the base of cloud will be at 1,000 - 2,000 ft.
- Hamburg:- The front is expected to have passed but there is much low cloud behind and it is uncertain when clearances will set in. There are about even chances of finding breaks in strato-cumulus cloud with base at 2,000 - 3,000 ft. and tops at 6,000 ft.
- Pilsen:- Much low and medium cloud.
- North and West France:- Small amounts of cloud.
- Rhone Valley:- Rather bad with towering cumulus cloud in the valley and on the high ground to the North.
- 2015 hours. Hamburg:- There will probably be 6 - 8/10 cloud.
- Home Bases:- 2 and 3 Group may be affected by low stratus or fog towards dawn.

Executive Orders

2. North West Germany offered good bombing conditions with a short period of good moonlight. A strong force was ordered to attack Kiel but later weather reports were less favourable and the numbers of aircraft operating were reduced by half and the target changed to Hamburg as this seemed to offer better prospects.

A small operation in which 2 aircraft were involved consisted of the dropping of special propaganda leaflets over unoccupied France. In addition minor operations - an attack on St. Nazaire, minelaying and leaflet dropping in occupied France - were allotted to freshmen.

.../Sorties

Sorties

3. The total number of sorties on this night was 104. For details of operations see attached table.

Weather Experienced

4. Home Bases:- Little cloud; moderate to good visibility but local deterioration towards dawn.
- North Sea and Dutch Coast:- Cloud 3-9/10, base 2,000 ft. tops 8,000 increasing to 8-10/10 in the east and over Holland; visibility moderate.
- Hamburg:- 8-10/10 cloud, base 2,000 ft., tops 8,000 ft., but some good breaks to the North; visibility good above cloud.
- France and Bay of Biscay:- Little or no cloud; visibility moderate with some haze over France.
- Moon above horizon 94% of full.

Photographic Evidence

5. Hamburg:- All the photographs taken with bombing on this raid show no cloud.
- St. Nazaire:- The two photographs taken with bombing by aircraft attacking this target both show the docks. No bursts are visible however.

Abortive Sorties

6. 22 sorties were abortive. 15 of these were due to technical defects, 4 to inability to identify the target, 2 to attacks by enemy fighters, and 1 to icing.

Casualties

74	Group	Type	Squadron	Category		
				Minor	A	AC B
Missing	1	Well II	304			
	1	Well IV	300			
	4	Halifax	76			
	4	Halifax	78			
Damaged by Flak	1	Well II	12	1		
	1	Well II	305	2		
	3	Well III	101	2		
	3	Well III	156	1		
	3	Stirling	7	1		
	3	Stirling	15	1		
	4	Halifax	10	3		
Damaged by Enemy Fighter	1	Well IV	300	1		
	4	Halifax	10	1		
Damaged, not by Enemy Action	3	Well III	9			1
	4	Halifax	10	1		

Summary8. Hamburg

The hope that the cloud over this target would have cleared by the time that our aircraft arrived was not fulfilled and most aircraft found 10/10 cloud over the target. 56 of the 81 aircraft despatched, however, claim to have

.....A 4000

3.

bombed the target area mainly on E.T.A. and D.R. from the mouth of the Elbe which was the last position which most crews were able to pin point. The glow of fires was seen against the cloud and 1 aircraft, which was able to see through a gap, reported that there was a large fire in a built up area thought to be the north part of the town. This is confirmed by a reliable intelligence source which reports that very severe damage was caused to property in the northern parts of the city. The "Hamburger Fremdenblatt" of May 5th says that almost without exception our bombs fell in densely populated residential districts where dwelling houses, 3 cinemas and 2 theatres were destroyed or damaged.

Aircraft which were unable to reach the target area bombed Heligoland, Jever aerodrome and various towns on the coast close to the mouth of the Elbe.

5 of our aircraft are missing from this operation. There was moderate to intense accurate predicted heavy flak over Hamburg and over Cuxhaven and moderate to intense light flak from many points in the Kiel Canal area and around the Elbe estuary. Damage by flak is reported by 11 aircraft one of which had to come down into the sea as a result. 2 of our losses may possibly be attributed to flak. Night fighters were active and there were a number of interceptions and one attack over N.W. Germany and Schleswig. There were also two attacks over the North Sea. 2 of our losses may be due to night fighters. An M.E. 110 is claimed as destroyed and a twin engined enemy aircraft, probably a Ju. 88, as possibly destroyed.

The attack on Hamburg lasted in all for 1½ hours from 0117 hours to 0230 hours. All except 4 of the 54 aircraft attacking the target, however, bombed in the 40 minutes from 0125 hours to 0205 hours.

St. Nazaire

The docks of this French port were attacked by a force of 9 freshmen in good weather conditions. 5 of these claim to have bombed the docks and the accuracy of their target identification is borne out by the photographs taken with bombing. 2 more claim to have dropped their bombs in the near neighbourhood.

Aerodromes in Holland

None of the 4 Blenheims which set out on this task attacked. 3 were unable to find this target owing to 8 - 10/10 cloud and the remaining one had to return early owing to engine trouble.

Mines were successfully laid by the 2 aircraft (freshmen) despatched on this task.

8 aircraft (6 freshmen) were despatched to drop leaflets over a number of towns in France and all except one did so successfully.

EC/S. 26342/1/ORS.
8th June, 1942.

Target	Group	Aircraft despatched	Interceptions		Casualties					No. of A/C claiming to have bombed Primary taking photos with bombing showing			A/C failing to attack Primary		Did not reach E.T.	
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause unk	Target	Target Area	Ground Details	Primary Target	Points within 5 miles of Target	Bombed other Target	abortive		Bombed other Target
ROSBURG	1	Well. II 8		2	1 Cat. E		missing	5							2	
		Well. III 10		2	3 Minor			7							1	2
		Well. IV 9	1	1			missing	5							2	1
	Well. L23 2 *		1				2									
	3	Well. III 14		2	3 minor	1 Cat. B		8							1	5
4	Well. IV 20	2	5	5 minor		missing	15					1		1	4	
5	Hampden 5 *						4							1	4	
ST. M. SAIRE	1	Well. Io. 2 + *					2									
		Well. II 2 + *			1 minor		1	1								
		Well. IV 3 + *	1		1 minor		1		2	2						2
	3	Well. III 1 +					1	1								
		Stirling 1 +					1									
ENGLHOVEN A/D	2	Blenheim 2 *											1		1	
GILBERTON A/D	2	Blenheim 2 *											2			
MIDDELAYDE	3	Well. III 1 +					1									
	5	Lancaster 1 +					1									
LE. FLETS	1	Well. Io. 3 + *					2									1
		Well. IV 1 + *					1									
		Well. L23 1 + *					1									
	5	Manchester 1 + *					1									
		Lancaster 2					2									
			104	4	13	1 Cat. E	1 Cat. B	5 missing	55				4	7	2	16
						15 minor										

* Presman

* Not fitted T.R. 1335

Total Abortive 22

BOMBER COMMAND REPORT ON NIGHT OPERATIONS, 4/5th MAY 1942

Meteorological Advice submitted to the Command

1. 0920 hours. The cold front now running East to West through Central Germany is moving South and by midnight tonight will lie along the Alps.
- Home Bases:- fine, with local mist towards dawn.
- France:- fine, ground haze locally.
- North Sea Coast of N. Germany:- much layer cloud.
- Western Germany west of 10° E:- cloud decreasing at night, probably to small amounts; moderate visibility.
- Germany east of 10° E:- Patches of residual convection cloud; good visibility.
- 1310 hours. Home Bases:- 3 Group, most of 1 Group and part of 2 Group satisfactory all night. 5 Group unfit by dawn locally. There may be difficulties at 4 Group owing to the rising dew points in air spreading from the West.
- Cologne:- Strato-cumulus will probably disperse by day and spread inland from Dutch Coast again at night. At Cologne however it is not expected to form again until midnight, or possibly considerably later. The Frankfurt, Mannheim area is least likely to be affected by cloud.
- Pilsen:- 10/10 strato-cumulus expected.
- France:- Fine.
- 1715 hours. Stuttgart:- At best there are even chances of good breaks, but the general opinion is that there will be at least large patches of strato-cumulus.
- Cologne:- The strato-cumulus is unlikely to reach Cologne before 0200 - 0300 hours.
- Pilsen:- Very cloudy, probably with cloud in several layers.
- Home Bases:- 1 Group expect that their eastern bases will be fit all night. 2 and 3 Groups also expect some bases to remain fit all night, but visibility will probably be about 2,000 yds. 4 and 5 Groups will probably require diversion into 2 and 3 Groups. 6 Group will remain fit all night.
- 2005 hours. Home Bases:- No change from outlook at 1715 hours.
- Middle and Upper Rhine:- Well broken cloud. Frankfurt and Mannheim more likely to have breaks than Stuttgart but good breaks may also be found there.
- Pilsen:- Chance of broken cloud.

Executive Orders

2. Cologne was originally selected for attack, but because low strato-cumulus cloud threatened to cover this area, the target was later changed to Stuttgart where weather conditions were expected to be more favourable.

Half the force, carrying incendiary bombs, were given an aiming point in the built-up area of the Town, the other half, carrying H.E. bombs, were given the Bosch factory at Feuerbach as their target.

A small operation against the Skoda works at Pilsen was also ordered.

A force of Freshmen was given the docks at Nantes as their target, because it was reported that there was a concentration of tankers in the docks, and others were sent on leaflet dropping and minelaying operations.

Sorties

3. The total number of sorties despatched was 149.

For details of the operations see the attached table.

Weather Experienced

4. Stuttgart:- 7-10/10 cloud with base about 5000 ft. Considerable ground haze reported by most crews. Conditions over South West Germany appear to have been variable, however, and some crews report no cloud and other good visibility below the cloud. The attack was very scattered however and all these reports may not refer to the target area.

Pilsen:- 4-6/10 layer cloud at 2000 - 3000 ft, 10/10 layer cloud at 7,000-9,000 ft; haze.

Nantes:- No cloud, poor visibility.

North French and Dutch Coast:- No cloud.

Routes:- To Stuttgart. No cloud over Belgium and N.E. France becoming 8-10/10 about 50 miles west of Stuttgart, base 5,000 ft, tops 8,000 ft. Ground haze over continent.

To Pilsen:- No cloud to about 7° or 8° E. then increasing.

Bases:- 1 Group. Fit till 0300 hours, then mist patches becoming extensive towards dawn.

2,3 and 4 Groups. Fit all night.

5 Group. Fit until 0300 hrs. then local fog and mist developing.

Moon above the horizon, 77% of full.

Photographic Evidence

5. Only 1 of the 22 successful photographs taken with bombing by aircraft attacking Stuttgart is within five miles of the target. The single photograph taken with bombing at Nantes shows bursts in a built-up area just South of the docks.

Abortive Sorties

6. 23 sorties were abortive. Of these 5 (3 on Stuttgart and 2 on Nantes) were due to inability to identify the target owing to the adverse weather conditions, 3 were due to enemy opposition, 14 to various technical defects and 1 to damage done to the aircraft during take-off.

3.

Casualties

7.	Group	Type	Squadron	Category				
				Minor	A	AC	B	E
Missing	1	Well.Ic	103					1
	3	Stirling	149					1
	3	Stirling	218					1
Damage by Flak	1	Well.IV	301	1				
	1	Well.IV	460	1				
	1	Well.III	57		1			
	3	Well.III	75	2				
	3	Well.III	419	1				
	3	Stirling	218	1				
	4	Halifax	35	1				
	5	Hampden	420			1		
	5	Lancaster	41	1				
	5	Lancaster	97					1
Damage by Enemy Fighter	3	Stirling	218			1		
	5	Hampdn	420					1
Damage Not by Enemy action	1	Well.Ic	103					
	1	Wel.II	12			1		
	3	Stirling	218					1
	4	Halifax	35			1		

Summary

8. Stuttgart:- 70 a/c were detailed to attack this town and 51 to attack the Bosch Works at Feuerbach on its outskirts. The weather was less favourable than had been expected, with 7 - 10/10 cloud and considerable ground haze. Only one aircraft claims to have found and bombed the Bosch Works but 73 state that their bombs fell in or close to the town. In many cases, however, aircraft bombed on E.T.A. and the position of red flares and not on any visual identification. The photographic evidence suggests that the attack was very scattered and that very few aircraft found the target. A number, however, bombed the same target as they saw each other's incendiaries fall and a few considerable fires were started. A reliable intelligence source who was present states that the districts of Heumaden and Lillanbuch to the S. of Stuttgart were on fire all night and it is therefore possible that this area received most of the attack. A number of aerodromes and built-up areas were bombed by aircraft who failed to find the target.

One aircraft is missing from this attack. 12 were damaged by flak and one by an enemy fighter. The flak over the target was only moderate in intensity, and not very accurate, but intense accurate heavy flak was encountered over Ostend by some aircraft.

The attack lasted for one hour from 0054 hours to 0155 hours. 53 of the aircraft claiming to have bombed the target bombed in the 20 minutes from 0110 - 0130 hrs.

Pilsen:- 3 of the 5 aircraft despatched to bomb the Skoda Works claim to have found and bombed their target from beneath 10/10 cloud at 7000 - 9000 ft.

One of the other two was unable to find the target and bombed Mainz on the way home. The remaining aircraft is missing.

One aircraft was damaged slightly by flak during this raid and one was so severely damaged by an enemy fighter that it crashed on landing and had to be written off.

.../Nantes

Nantes:- Heavy ground haze made identification of this target difficult and only 4 of the 9 freshmen which set out to attack it did so. The one photograph taken provides evidence of the successful target identification. One aircraft which failed to find the target bombed St. Nazaire as an alternative. One aircraft is missing from this operation.

Leaflets:- 6 aircraft (4 freshmen) left on leaflet dropping sorties over France. One had to return early owing to a technical defect. The remainder dropped their leaflets successfully but one was shot down by a friendly fighter on the return journey. The crew baled out successfully.

Minelaying:- The 8 aircraft despatched on this task successfully laid their mines.

EC/S.26342/1/ORS.
9th June 1942.

Target	Group	Aircraft Despatched	Interceptions		Casualties			No. of aircraft claiming to have attacked	No. of aircraft bombed Primary taking photos with bombing details	Primary Target	Points within 5 miles of Target	Bombed Target Area		Bombing other Territory		Total E.T.	
			Attack	Other	Due to E.A.	Not due to E.A.	Cause unknown					Target	Target area	Target	Abortive		Bombed other Target
STUTTGART	3	Well.III 3*	1	6	1 Cat.A 4 Minor							4	3	1	1	1	
		Well.L23 3															
		Stirling 12			1 Cat.E		1 missing					2	1		1	1	
		4 Halifax 7			1 minor	1 Cat.AC				22		1			1	1	
		5 Lancaster 4		1	1 Cat.E 1 Minor								1	1	1	1	
BOGH WORKS	1	Well.Ic. 8*		2	1 Cat.B						3		2				
FEUERWERK	1	Well.IV 16*	1	1	2 Minor						11			1	1		
NR. STUTTGART	4	Well.II 8*												1	2		
		5 Hamp. 19*	1		1 Cat.E 1 Cat.AC			1	15					1	1		
FILSEN	3	Stirling 5	1		1 Cat.AC 1 Minor		1 missing	3				1			117		
NANTES	1	Well.Ic 1*					1 missing										
		Well.II 1*			1 Cat.AC			1									
		Well.III 2*						2		1	1						
		3 Well.III 5*										1	2				
LEAFLETS	1	Well.II 1*						1					1				
		3 Stirling 1*			1 Cat.E												
		4 Halifax 1															
MINELAYING	5	Han. 3*													1		
		5 Hampden 3*															
		Han. 2*															
			149	4	10	3 Cat.E 2 Cat.AC 1 Cat.A 9 Minor	1 Cat.E 1 Cat.B 2 Cat.AC	3 missing	8		87	22	9	7	8	6	
												Total Abortive		23			

* Not fitted T.B. 1335

+ Freshmen

NIGHT RAID REPORT NO. 61

COPY NO. 16

BOMBER COMMAND REPORT ON NIGHT OPERATIONS 5/6TH MAY, 1942.

Meteorological Advice submitted to the Command.

1. 0920 hours:- The estimated position of the warm front at midnight is 61° N, 10° E. - 56° N, 10° E. - N.W. Holland. Along the North Sea coast of the continent and for some distance inland there will be much medium and some low cloud. The medium cloud will decrease inland and little of it is expected over the Ruhr. At Hanover the medium cloud should be well broken. Elsewhere over Germany the weather will be fine with some ground haze.

France:- Fine with mist developing locally in the morning, particularly about dawn.
- 1245 hours:- The threat of fog in East Anglia and South Lincolnshire in the early hours of the morning is now regarded as serious. Otherwise as at 0920 hours.
- 1730 hours:- Stuttgart:- There may be increasing medium cloud during the night, but it is expected to be broken. Ground haze is probable.

France:- Good conditions.

Denmark, Heligoland Bight area:- Weather condition may be bad with strong upper winds. The Baltic area off Denmark is expected to be bad, but in the Heligoland area there is a chance of no cloud below 1,500 ft.

Home Bases:- No difficulties before dawn. There is risk of rapid and widespread deterioration of visibility after daylight in 2, 3 and 5 Groups, but 1 and 4 Groups do not expect serious visibility troubles. Any diversions will have to be northwards as Southern England is unpromising.

Executive Orders

2. Stuttgart and the Bosch works were again chosen as the main target in order to continue the attack of the previous night, and because the weather there offered the best conditions for bombing.

A force of fighters were again ordered to Nantes where the docks held profitable shipping targets and a few aircraft were sent out to drop leaflets.

Sorties

3. 110 sorties in all were made. For details of the operations see attached table.

Weather Experienced

4. Stuttgart:- The only cloud was small amounts of cirrus. Heavy ground haze was reported by most crews.

Nantes :- No cloud; ground haze.

Inland in France:- No cloud; ground haze.
Moon above the horizon.

.../5.

Photographic Evidence

5. Stuttgart:- Only 1 of the 24 photographs taken with bombing has been plotted within five miles of the target. 9 photographs have been plotted over open country 5 - 7 miles S.W. of the town, suggesting that a decoy was in operation. This has not, however, been confirmed.

Nantes:- The 5 photographs taken with bombing during this attack all show open country and none have been plotted within five miles of the target.

Abortive Sorties

6. 23 sorties were abortive. 13 of these were due to technical defects 9 (1 on Stuttgart, 8 on Nantes) to inability to find the target and 1 was due to the aircraft swinging on take-off owing to a cross wind.

Casualties

7.	Group	Type	Squadron	Category		
				Minor A.	AC. B.	E.
Missing	1	Well.II.	12			1
	1	Well.III	150			1
	1	Well.423	305			1
	3	Stirling	7			1
Damaged by Flak	1	Well.III	150	2		
	1	Well. IV	142	1		
	3	Well. IC	156	1		
Damaged by Enemy Fighter	1	Well. II	12	1		
	4	Halifax	10		1	
Not due to Enemy Action	1	Well. II	305			1
	1	Well. III	150			2

SUMMARY

8. STUTTGART On this night there was no cloud over STUTTGART but the ground haze was encountered and this, combined with the darkness of the night, made pinpointing of the target very difficult.

41 aircraft were despatched to bomb the town of Stuttgart and 36 to attack the Bosch factory at Feuerbach on the outskirts. No crew claim to have identified and bombed the Bosch factory. 54, however, claim to have bombed the town although a large proportion of these bombs on E.T.A. without seeing any ground detail, and others only to have identified bends in the River NECKAR and not to have seen the town. Scattered fires, a few of them large, are reported. The photographic evidence does not suggest that the chosen targets were hit in this raid and its result must be regarded as very doubtful.

2 crews who were unable to locate STUTTGART claim to have bombed aerodromes in the vicinity. 4 aircraft which had to return early for various reasons bombed alternative targets, one SAARBRUCKEN, where a very large fire was started, one OSTEND DOONS, and two aerodromes.

Two of the 54 aircraft claiming to have attacked this target did so at 0105 hours and the remainder in the 40 minutes between 0115 hours and 0155 hours.

Four of our aircraft are missing from this operation. Moderate predicted heavy flak, not very accurate, was encountered over the target and also over KARLSRUHE and 3 aircraft were damaged. There was very little light flak. Enemy night fighters were encountered both over the target and over the French Coast, 5 attacks being made, resulting in damage to two of our aircraft. It is probable that two of our losses were due to enemy fighter action. An H.E. 109 is claimed as destroyed by a Halifax.

...../MINES.

HANTES. 19 Freshmen were detailed to attack this target. Heavy haze was encountered and only four aircraft claim to have bombed the target. One reports that a fire was started. 3 others state that they dropped their bombs in its neighbourhood. None of the photographs taken with bombing, however, has been plotted within five miles of the target and it is unlikely that any success was achieved.

One aircraft which failed to identify the primary bombed CHATEAU BOUGON aerodrome another CHERBOURG Docks and two more S.T NAZAIRE Docks

One aircraft attacking this target received minor damage from flak.

SCHIPOL AERODROME. Two of the four Blenheims despatched to this target claim to have bombed the airfield and one the Aerodrome building. The remaining one was unable to be certain, owing to the dark, that his bombs hit the primary target.

LEAFLETS. Nine of the ten freshmen sent on this operation successfully performed their allotted tasks. The remaining one never took off owing to the aircraft swinging when taxiing.

BC/S. 26342/ /ORS.
30th May, 1942.

Base	Aircraft	No. of aircraft	Destroyed		Cat. A		Not destroyed		with bombing		Points within 5 miles of Target		Bombing other Target		Bombing other Territory		Did not reach
			Attacks	Others Due to E.A.	Not due to E.A.	Cause unknown	Target	Target Area	Ground Details	Primary Target	Bombing other Target	Abortive	Bombing other Target	Abortive			
STUTTGART	Well. III	17															
	Stirling	13		2		1 missing											
	Halifax	11	1	3	1 Cat. A												
	Well. II	9*	1		1 minor	1 Cat. B	1 missing										
BOOTH WORMS FEVERBACH	Well. III	9	1		2 minor	2 Cat. E	1 missing										
	Well. IV	12*	2		1 minor												
13. STUTTGART	Well. I25	2*					1 missing										
	Lancaster	4															
MURINS	Well. II	3*															
	Well. IV	4*															
	Well. Ic	4*			1 minor												
	Well. III	3*															
LEAFLETS	Halifax	5*															
	Stirling	1*															
	Halifax	1*															
	Hampton	1*															
SCHIPOL A/D	Man.	4*															
	Lancaster	2*															
	Blenheim	4*															
		110	5	6	1 Cat. A 5 minor	3 Cat. E 4 missing	7	67				5	2	4	8	6	

* Freshmen

* Not fitted T.R. 1335

Total Abortive 23

MOST SECRETNIGHT RAID REPORT NO.62COPY NO.16BOMBER COMMAND REPORT ON NIGHT OPERATIONS MAY 6/7th 1942Meteorological Advice submitted to the Command

1. 0915 hours. Estimated positions of fronts at midnight are:- (a) Occluded front, Inverness $55^{\circ}N$ $5^{\circ}E$ - Berlin (b) cold front Stornaway - $61^{\circ}N$ $40^{\circ}E$ (c) warm front $60^{\circ}N$ $40^{\circ}E$ - Copenhagen.

Home Bases:- variable amounts of medium cloud and high cloud; visibility moderate.

Germany:- North of $52^{\circ}N$. much medium and low cloud. Between $52^{\circ}N$ and $50^{\circ}N$ variable amounts of medium and high cloud. South of $50^{\circ}N$. fine with some ground haze.

France:- Fine with some ground haze and patches of sea fog on the west coast between Brest and Bordeaux.

1300 hours. No change.

1710 hours. Home Bases:- There will be local smoke trouble in 1, 4 and 5 Groups but otherwise satisfactory.

Stuttgart:- Fine; haze present but no worse than previous night. Small amounts of cloud en route.

France:- No cloud; visibility at Nantes should be good.

Executive Orders

2. Stuttgart was in the area in which the best weather conditions were expected and a continuation of the attack of the two previous nights was ordered.

Freshmen were again sent to Nantes to continue the attack on that port. A few aircraft were also sent out to drop leaflets.

Sorties

3. The total number of sorties despatched was 129. For details of the operations see attached table.

Weather Experienced

4. Stuttgart:- No cloud reported by most crews and small amounts by others. Visibility poor with considerable ground haze particularly during the later part of the attack.

Route to Stuttgart:- Only scattered cirrus cloud encountered en route. Extensive patches of thick ground haze over the Continent.

Nantes:- No cloud; much haze.

Home Bases:- Small amounts of cloud, moderate visibility.

Photographic Evidence

5. Stuttgart:- None of the 30 photographs taken with bombing have been plotted within 5 miles of Stuttgart. Most of the photographs which have been plotted lie in the neighbourhood of Heilbronn or Phillipsburg. Fires are seen burning in the town of Heilbronn and useful damage was certainly

../done

done there. In Phillipsburg, however, there are no fires and it is possible that a decoy may have drawn the aircraft to this area.

Nantes:- 1 of the 5 successful photographs taken with bombing shows dock area and 3 more are within 5 miles. ~~Two sticks of bombs bursting in town can be seen and there is a steady fire burning close to the river bank probably in the dock area.~~

A reconnaissance over the area on May 7th showed that there was a fair amount of damage which could be attributed to the raids of this night and two previous nights. Most of this damage occurred on the island or in the industrial area on the North Bank of the river in its immediate vicinity. 8 industrial or shipyard buildings have been destroyed or seriously damaged and a further 4 damaged. There are also some incidents in residential property.

Abortive Sorties

6, 24 of the sorties on this night were abortive. 5 (2 on Stuttgart, 2 on Nantes and 1 on Schipol aerodrome) were due to inability to locate the target, 13 to technical defects, 1 to an attack by an enemy fighter, 1 to the illness of the pilot, 1 to a navigational error and 1 to the aircraft being hit over Karlsruhe by a 4 lb. incendiary bomb from one of our own aircraft. In 2 cases no reason was given.

Casualties

7.	Group	Type	Squadron	Category		
				Minor	A	AC B
Missing	1	Well. IV	460			
	2	Blenheim	18			
	3	Well. III	115			
	3	Well. III	419			
Damaged by Flak	4	Halifax	35			
	1	Well. IV	460	1		
	3	Well. III	57		1	
	3	Stirling	15	1		
	3	Stirling	149	1		
	3	Stirling	218			1
Damaged by enemy fighter	4	Well. II	158	1		
	4	Halifax	10	1		
Damaged not by enemy action	5	Lancaster	44			1
	1	Well. Ic.	103			1
	3	Stirling	149			

Summary

8. Stuttgart 97 aircraft were despatched to attack this town and 57 claimed to have bombed it. Haze was again encountered and this made target identification difficult. More ground detail was, however, seen by crews than on the previous two nights, but the photographic evidence suggests that on the whole aircraft failed to find the target and that the brunt of the attack fell on Heilbronn. A number of crews report fires in built-up areas and it appears from the photographs that these were in Heilbronn.

11 aircraft which were unable to find the target bombed aerodromes and built-up areas in the neighbourhood of Stuttgart. 4 aircraft which were unable to reach the target for various reasons dropped their bombs in the neighbourhood of Saarbrücken, 1 bombed Karlsruhe and another an aerodrome between Hazebrück and Airo.

The aircraft which claim to have attacked Stuttgart dropped their bombs between 0035 hours and 0132 hours.

6 of our aircraft are missing from this operation. Night fighters were

.../active

3.

active over the target and at many points en route. 5 attacks were made on our aircraft, and 2 of the enemy fighters are claimed as probably destroyed, one by a Stirling and one by a Lancaster. In addition a Halifax and a Lancaster both claim to have destroyed enemy aircraft which they encountered but which did not fire on them. 2, and possibly 3, of our losses appear to have been due to enemy night fighters.

Moderate light and heavy flak were reported over the target and over Karlsruhe, and 7 of our aircraft report damage. 3 of our missing aircraft were probably destroyed by flak.

Nantes 19 freshmen were despatched to attack this target. 3 of them claim to have dropped their bombs in the docks and 6 more to have done so in their near neighbourhood. The photographs taken with bombing confirm that the raid was a success.

Aerodromes in Holland Eindhoven, Leeuwarden, Schipol and Soesterburg aerodromes were attacked by 1 Blenheim each. The aircraft bombing Leeuwarden and Soesterburg aerodromes claim to have attacked their primary target. Schipol aerodrome could not be identified by the aircraft which was detailed to attack it and it therefore brought its bombs back to base. The aircraft which set out to attack Eindhoven is missing.

Leaflets were dropped successfully by the 9 freshmen who were detailed for this task.

BC/S.26342/3/ORS

1.6.42.

Target	Group	Aircraft despatched	Interceptions		Casualties			No. of A/c claiming to have attacked target	No. of A/c claiming to have bombed Primary target	No. of A/c claiming to have bombed Primary target taking photos with bombs, dropping Grounds Primary Points within 5 miles of Target	A/c failing to attack Primary				Didn't reach E.T.				
			Attacks	Others	Due to E.A.	Not due to E.A.	Causes unknown				Reached Target Area	Reached Enemy Territory	Bombed other Target	Aborted					
STUTTGART	1	Well.Ic. 7*		1		1	Cat.AC	4											
		Well.IV. 10*	1	1	1	Minor		2 missing	6										
	3	Well.III. 31	1	1	1	Cat.A		3 missing	17										
		Stirling 15	2			Cat.A	1	Cat.B		10									
						2	Minor												
4	Well.II. 7				1	Minor			3										
	Halifax 7		2		1	Minor		1 missing	2										
	5	Hampden 10*							8										
	Lancaster 10	1	1		1	Cat.B		7											
EINDHOVEN A/D	2	Blenheim 1*						1 missing											
	2	Blenheim 1*							1										
LEEUAWARDEN A/D	2	Blenheim 1*											1						
SCHIPOL A/D	2	Blenheim 1*																	
SOESTERBURG A/D	2	Blenheim 1*																	
NANTES	1	Well.II. 4*		1					1	2									
		Well.IV. 2*																	
	3	Well.III. 7*							3	3									
		Stirling 2*		1						1									
	5	Hampden 2*							2										
	M'ter 2*							2											
LEAFLETS	3	Stirling 2*							2										
	4	Halifax 2*							2										
	5	M'ter 2*							2										
			129	5	8	1	Cat.B	1	Cat.E	7	missing	10	72						
						1	Cat.AC	1	Cat.C										
						1	Cat.A												
						5	Minor												
														11	5		5	9	10
														Total abortive 21					

* Freshmen

* Not fitted T.R. 1335

TOP SECRETNIGHT RAID REPORT No.63COPY No./6BOMBER COMMAND REPORT ON NIGHT OPERATIONS 7/8th MAY, 1942Meteorological Advice Submitted to the Command.

1. 0920 hours. The estimated midnight position of the cold front is N.W. Ireland - Spurn Head - Zuyder Zee - South of Berlin.
- Home Bases:- A narrow belt of low cloud behind the front; otherwise fair with mist patches towards dawn ahead of the front.
- Target Areas:- In N. Germany, immediately behind the front, there will be a narrow belt of low cloud which is expected to clear along the Baltic Coast giving very good visibility. Ahead of the front there will be variable amounts of medium cloud decreasing to small amounts south of 50°N. There will be haze in the valleys south of 50°N. France will have fine weather with haze.
- 1240 hours. The estimated midnight position of the cold front is now further south along the line N. Wales - Norfolk - North of the Ruhr, then eastwards. The cloud along the front is not expected to be deeper than 10,000 feet in the western North Sea.
- Home Bases:- Front not expected to give much precipitation but mainly strato-cumulus cloud.
- Otherwise as at 0920 hours.
- 1720 hours. The estimated midnight position of the cold front is now further south than previously over the British Isles, and south of home bases.
- Home Bases:- Over East Anglia cloud may be down to 1,000 feet occasionally but on the whole the cloud base will be 1,500 feet or more. In the north of the home base area cloud will break up especially inland.
- Heligoland and S. Denmark:- Cloud 5 - 7/10 stratus or strato-cumulus base about 2,000 feet. Some convection cloud, tops 10,000 feet may be encountered en route over the North Sea with icing conditions in it.
- France:- Aircraft will have to pass through front, Thunderstorms are not likely and conditions along the front should not be unduly unfavourable, with cloud base not below 1,500 feet. Conditions at Nantes should be favourable but there will be fog over the sea to the west. Clear skies and reasonable winds are likely over Central and Southern France.

Executive Orders

2. Clear weather was forecast for the north coast of Germany and all aircraft which could carry out sea mines and were due to operate this night were detailed for minelaying in accordance with the Baltic mining plan.

An attack on St. Nazaire by a small force of freshmen was also ordered and on Halifax freshman was despatched to drop leaflets over Vichy and Clermont Ferrand.

Sorties

3. The number of sorties despatched was 87. For details of the operations see attached table, in which, for the minelaying aircraft, only the results of the

.../minelaying

minelaying are given and details of the use of the 500 lb. and 250 lb. G.P. bombs carried by some of these aircraft are not given.

Weather Experienced

4. Danish Islands:- Mostly cloudless; small amounts of strato-cumulus at 3,000 - 4,000 ft. in places; good visibility; northern lights.
- S.W. Baltic:- Mostly cloudless; patches of haze and fog.
- Heligoland Bight:- Small amounts of strato-cumulus cloud at 3,000 - 4,000 ft. Good visibility.
- Route over North Sea:- Broken strato-cumulus in south with medium cloud above. Light clear ice formed at 10,000 ft. in cloud over the sea.
- St. Nazaire:- No cloud; visibility reported good by the two aircraft which bombed but the other three report haze and inability to find the target.
- Route:- 8/10 strato-cumulus cloud at 3,000 ft. over southern England extending to 11,000 ft. over the Channel and breaking up inland over France.
- Home Bases:- Fog patches in South West only; low stratus in South-West and elsewhere locally at 1,000 ft., with occasional light rain in South-East England; much strato-cumulus cloud with freezing level at 3,000 - 4,000 ft.

Abortive Sorties

5. 16 sorties in all were abortive. 7 (3 on St. Nazaire and 4 minelaying) were due to bad visibility, 8 were due to technical defects, and 1 to the aircraft being too late at the target, as the crew had to change aircraft their first one being u/s.

Casualties

6.	Group	Type	Squadron	Category		
				Minor	A	AC B
Missing	3	Well.III	57			
	5	Hampden	420			
Damaged by flak	3	Well.III	57			1
	5	Hampden	420	1		
	5	Lancaster	97	2		
Damaged, not by Enemy action	3	Well.III	75			1

Summary

7. Minelaying 81 aircraft set out to lay mines in the Heligoland Bight and Kiel Bay, and around the Danish Archipelago. Except in Kiel Bay weather conditions were excellent, and 57 did so successfully. A further 9 laid their mines in alternative areas.

In addition to their mines a proportion of these aircraft carried 500 lb or 250 lb. bombs. 11 aircraft dropped these bombs on various targets which presented themselves. 3 bombed the Island of Sylt and 2 more the causeway connecting it with the mainland; 2 bombed Brondrum aerodrome and 1 an aerodrome near Norby on Fano Island; 2 bombed searchlights and flak near Esbjerg; 1 bombed a flak ship off Kiel.

.../The enemy defences

The enemy defences encountered by our aircraft were not very considerable and only 2 of our aircraft are missing. Night fighters were encountered off the Frisians and over Denmark where 1 attack was made. Varying amounts of light flak were encountered from the coast of Schleswig and Denmark and it was particularly intense in Kiel Bay where one of our aircraft was probably shot down. 4 aircraft report flak damage.

St. Nazaire Only 2 of the 5 freshmen who set out to attack this target succeeded in locating it. These two, however, claim to have identified and bombed the docks.

Leaflets 1 Halifax freshman successfully dropped leaflets over Vichy and Clermont Ferrand. This aircraft was intercepted about 16 miles south of Worthing but evading action was successful.

PC/S.26342/3 /ORS.
30th May, 1942.

Target	Group	Aircraft despatched	Interceptions		Casualties			Status of aircraft			Bombing results			Did not reach E.T.	
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause unknown	Claiming to have attacked	Not claiming to have attacked	Primary Target	Points within 5 miles of Target	Bombed other Target	Abortive		Bombed other Target
MINELAYING	3	Well.III 2*	1		1 Cat.C	1 Cat...	1 missing	24				3	3	4	1
		Stirling 12						12							
	5	Hampden 14*					1 missing	8					2		3
		Manchester 8*			1 minor			4				1			3
		Lancaster 11	1		2 minor			9						2	
ST. NAZAIRES	3	Well.III 4*					2					2*			
		Stirling 1*										1			
LEAFLETS	4	Halifax 1*	1				1								
			87	1	2	1 Cat.C	1 Cat...	2 missing	2	58		3	9	6	7
						3 Minor						Total Abortive = 16			

* Freshman

* Not fitted T.R. 1335

BOMBER COMMAND REPORT ON NIGHT OPERATIONS 8/9th M.Y., 1942

Meteorological Advice Submitted to the Command

- 1. 0920 hours. Estimated midnight position of front as warm front is N.W. Ireland - S. Wales - 50°N 2°W becoming cold front to just south of Paris and on to Munich.

Home Bases:- Fine with moderate visibility in Yorkshire and Lincolnshire; south of the Wash more cloud with a chance of slight rain.

Germany:- north of the front the weather will be fine with very good visibility along the Baltic Coast and good to very good visibility along the North Sea Coast, but local industrial haze inland especially in West Germany. Along the front over Germany the cloud will be mainly of the residual convection type. South of the front there will be variable, usually small, amounts of cloud.

West Coast of France:- increasing amounts of medium cloud.

- 1245 hours. No change from 0920 hours.

- 1715 hours. Home Bases:- satisfactory.

Rostock:- small amounts of cloud, probably only cirrus; good visibility.

Heligoland Bight and route to Rostock over North Sea:- patches of strato-cumulus cloud. base 2,000 - 3,000 ft.

N.W. and Central France:- much medium cloud with risk of thunderstorms persisting into the night with convection type cloud to high levels.

Executive Orders

- 2. Warnemunde was situated in the area in which the best bombing conditions were expected. The Heinkel factory there, which was known to be manufacturing fighters, was selected as the main target as this suited the general policy of accelerating the wastage of enemy fighters.

Sorties

- 3. The total number of sorties despatched was 200. For details of the operations see attached table.

Weather Experienced

- 4. Warnemunde:- traces of strato-cumulus; good visibility, impaired later by smoke.

Heligoland Bight:- patches of strato-cumulus; visibility good.

Route:- considerable strato-cumulus in the western part of the North Sea, little beyond, with patches over Danish coast and near Fehmarnbelt; visibility good.

Home Bases:- fit until 0500 hours then patches of low stratus in the south becoming extensive south of 52½°N by 0600 hours.

Moon not above the horizon.

Photographic Evidence

5. 18 successful photographs were taken with bombing, 10 of which showed target and a further 25 points within 5 miles. This shows that a high proportion of the force reached the target area. The photographs showing the target suggest, however, that many bombs only scored near misses and this is borne out by subsequent reconnaissance. Only slight damage has been done to one building of the Heinkel Works. Four buildings in the neighbourhood of the harbour basin have been destroyed or damaged and there is considerable damage to the railway station and tracks. There are also several incidents in residential property and roadways. The bulk of the attack, however, seems to have fallen on open country, about 100 craters being visible around the town.

Abortive Sorties

6. 20 sorties on this night were abortive. 15 of these were due to technical defects, 1 to an error in navigation, 1 to the aircraft being too late at the target, 1 to an attack by enemy aircraft, 1 to flak damage, and 1 to the sickness of the pilot.

Casualties

7.	Group	Type	Squadron	Category		
				Minor	A	B
Missing	1	Well. II	12			
	3	Well. III	9			
	3	Well. III	419			
	3	Stirling	15			
	4	Well. II	158			
	4	Halifax	10			
	4	Halifax	76			
	5	Hampden	408			
	5	Hampden	420			
	5	Manchester	50			
5	Lancaster	44				
Damaged by Flak	1	Well. Ic.	103	1		
	1	Well. IV.	460	1		
	3	Well. III	156	1		
	3	Stirling	7	3		
	3	Stirling	218	2		
	4	Well. II	158	2		
	5	Halifax	35	1		
	5	Manchester	50	1		
5	Lancaster	97	1			
Damaged by enemy fighter	1	Well. IV	142	1		
	4	Halifax	10	1		
Damaged by balloon cable	3	Well. III	101	1		
Damaged, not by enemy action	4	Halifax	10			1

Summary

8. Warnemunde The weather over the target was free from cloud and the visibility was good until it was affected by the fires which were started. There was, however, a very large number of searchlights in and around the target and these were used to dazzle the aircraft attacking in a very effective manner, and many crews were, as a result, unable to pin-point their allotted aiming points.

34 aircraft from 1 Group set out to attack the town of Warnemunde with incendiary bombs and 32 claim to have done so successfully and to have started fires. These fires were scattered and none of them apparently were very large.

.../The Heinkel Works

3.

The Heinkel Works in the town were attacked by 148 aircraft. 129 of these were briefed to attack with H.E. and a small number of incendiaries from a normal height between 0100 hours and 0150 hours. Of these aircraft 37 claim to have identified and bombed the works and a further 61 say they bombed its estimated position or the town. A force of 19 aircraft were despatched to carry out a low level attack on the Heinkel Works commencing at 0150 hours. Only 4 of these aircraft identified the target successfully and a further 7 dropped their bombs in its neighbourhood.

12 aircraft were sent to attack the searchlights in and around Warnemunde during the attack on the town. 8 of them carried out their allotted task, using 500 lb. H.E. bombs, 40 lb. fragmentation bombs, and machine gun-fire. The number of searchlights, however, was so large that they did not succeed in their object of extinguishing a large proportion of them. The crew of one aircraft state that they did not consider the use of the 40 lb. fragmentation bomb to be a suitable method of attacking searchlights, as these usually doused on the run up and came on again almost immediately after the bombs had exploded.

As the photographs taken with bombing and on a subsequent daylight reconnaissance show, this attack was only moderately successful. This was due partly to the very effective use of searchlights by the enemy and partly to the fact that the target is a very difficult one to hit, the town and factory forming a narrow strip about a quarter of a mile wide along the waterfront.

5 aircraft which were not able to identify the target or arrived after their allotted bombing time bombed aerodromes in the neighbourhood of Warnemunde, and 1, which had to turn back after an attack by an enemy aircraft, bombed Sylt.

137 of the 149 aircraft which attacked Warnemunde dropped their bombs in the hour between 0100 hours and 0200 hours. The whole attack lasted, however, from 0045 hours when 1 aircraft bombed early to 0245 hours when the last of the stragglers dropped his bombs.

Enemy fighters were encountered by our aircraft as they crossed the North Sea coast of Schleswig and South Denmark and also in the neighbourhood of the target. They were not very active, however, and there were only 3 attacks, in 2 of which our aircraft were damaged, and 6 other interceptions.

Accurate heavy flak was directed at our aircraft from Esbjerg, Flensburg and other places en route, and also over the target where it was moderate in intensity. Light flak over the target was, however, very intense. It was acting in collaboration with searchlights which were present in great numbers and were also used for dazzling. In all 14 aircraft report flak damage.

19 of our aircraft are missing from this raid. 3 of these were from among the 19 which carried out the low-level attack on the factory in the closing stages of the raid and 3 more from among the 12 aircraft which came down low to extinguish searchlights. It is probable that most, if not all of these 11 fell victims to the light flak defences of the area. The losses of the aircraft carrying out the high level attack were 8 out of 162 (4.9%) which, although a high proportion, is not an unduly high one considering the weather conditions. It appears likely that one of our aircraft was lost to an enemy fighter and that five were shot down by heavy flak en route, three of them over Esbjerg.

Leeuwarden aerodrome This target was successfully attacked by 3 Blenheims who all bombed the flare path and saw bursts across the airfield.

Mihelaying The 3 aircraft despatched on this task all laid their mines in the allotted positions.

Target	Type	No. of aircraft dispatched	No. of aircraft			No. of aircraft			No. of aircraft			No. of aircraft			No. of aircraft		
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause unknown	Claiming to have attacked Target	Claiming to have attacked Area	Ground details	Primary Target	Points within 5 miles of Target	Reached Target	Reached other Target	Reached Target	Reached other Target	Reached other Target
WARRINGTON	1	Well. Io	5*		1	1	Minor										
		Well. IV	29*	1	1	2	minor										
HEINZEL FACTORY WARRINGTON	1	Well. II	13*						1 missing	5	4						
	3	Well. III	33	1	1	2	minor		2 missing	13	15						
WARRINGTON		Well. I	3														
		Stirling	27				5 minor		1 missing	7	18						
	4	Well. II	9		1	2	minor		3 missing	1	4						
		Hullifax	17	1	2	2	minor	1 Cat. B	1 missing	3	10						
	5	Hampton	16*						3 missing	5	3						
	Mon.	9*				1 Cat. E		1 missing	3	2							
	Lancaster	21						4 missing	4	10							
SEARCHLIGHTS AT WARRINGTON	1	Well. Io	3*														
	2	Well. III	3						1 missing	2							
	4	Well. II	1*						1 missing								
		Hullifax	2						1 missing	1							
	5	Hampton	3*							2							
LEINWADEN A/D	2	Bienheim	3*							3							
MIDDELAYNE	3	Well. III	1														
	5	Mon.	2*							2							
			200	3	6	1 Cat. E	1 Cat. B	19 missing	52	103							
						15 minor											

* Not fitted T.R. 1335

Total abortive 20

MOST SECRETNIGHT RAID REPORT NO. 6COPY NO. 16BOMBER COMMAND REPORT ON NIGHT OPERATIONS 9/10TH MAY, 1942Meteorological Advice Submitted to the Command

1. 0915 hours. Home Bases:- There is a threat of low stratus which may set in any time after dark.
- Target Areas:- North Sea Coastal strip of Germany: patches of fog or low stratus. . . Along the Baltic Coast and inland to a line approximately from Cologne to Danzig; patches of strato-cumulus. Further south over Germany generally small amounts of cloud, becoming variable in the extreme south of Germany and North Italy. Over France much medium cloud and some low cloud, especially in Western-France.
- 1245 hours. The threat of low stratus at home bases has lessened. Only small amounts of strato-cumulus are now expected over Denmark and the Western Baltic.
- 1700 hours. Home Bases:- The risk of low stratus is now slight but there will probably be patches of strato-cumulus at 1,000 feet - 2,000 feet which may become 10/10 over considerable areas.
- Heligoland Bight and South Denmark:- Small patches of strato-cumulus.
- Paris:- Cloud layers at several levels with rain, but rain not expected to spread as far north as Lille.

Executive Orders

2. A few aircraft were detailed for minelaying in the only area within range which provided suitable weather for any form of night operation.

Sorties

3. 20 sorties were made on this night. The details of the operations are given in the table below.

Target	Group	Aircraft despatched	No. laying mines in primary area	No. laying mines in alternative area	No. not over enemy territory
Mine-laying	3	Well III 14	12	1	1
	5	Hampden 1*	1	-	-
		Man. 2*	2	-	-
		Lan 3	1	-	2
			16	1	3

* Not fitted with G.R. 1335

The other columns usually shown in the table are not applicable to this night.

Weather Experienced

4. Heligoland Bight and Western Baltic :- No cloud; good visibility.

Moon not above the horizon.

...../Abortive Sortie.

Abortive Sorties

5. 3 sorties were abortive owing to technical defects.

Casualties

6. NIL.

Summary

7. 16 of the 20 aircraft despatched to lay mines in the Heligoland Bight and the Western Baltic did so successfully. Another owing to inability to pinpoint and lack of petrol, laid his mines in an alternative position.

The 14 Wellingtons of 3 Group each carried three 500 lb. G.P. bombs in addition to their mines, and these were used in 4 cases. 2 aircraft bombed the bridge and causeway at Middelfart with unobserved results. 1 aircraft bombed the causeway connecting Sylt and the mainland and saw his bombs burst on it. The bursts were followed by electrical flashes and immediately afterwards the flare-path on the island went out. Another aircraft bombed a ship in Kiel Bay and scored near miss astern of it.

There are no reports of any enemy opposition on this night.

BC/S. 26342/1/ORS.
2.6.42.

MOST SECRETNIGHT RAID REPORT NO.66COPY NO. 16BOMBER COMMAND REPORT ON NIGHT OPERATIONS
MAY 15/16TH, 1942.Meteorological Advice Submitted to the Command

1. 0915 hours. The estimated midnight positions of fronts are:-
- (a) occluded front Orkneys - Central Denmark - 48³⁰° N 15° E.
- (b) occluded front W. Scotland - Isle of Wight becoming warm front to Bordeaux and cold front to N.W. France and then south westwards.
- Home Bases:- Low stratus spreading inland from the sea along the east coast. Further inland, there will be increasing amounts of medium and low cloud, but it cannot yet be said whether low frontal cloud will extend to the Eastern Counties by early morning.
- Target Areas:- There will be much medium cloud in the Kiel and Hamburg areas. From there southwards to 50° N small amounts of cloud and ground haze will occur. South of 50° N there will be residual convection cloud with local thunderstorms. East France will have small amounts of cloud and ground haze and in West France there will be much medium and low cloud.
- 1245 hours. Home Bases:- Rain and low cloud associated with the front is not now expected to affect operational home bases before early morning and possibly not before dawn. The threat of low stratus from the North Sea is confined to a narrow strip except in Yorkshire when it will spread further inland.
- North Plain of Germany:- probably small amounts of cloud.
- 1725 hours. Home Bases:- Rain is expected to reach the western part of the operational areas by 0300 hours. The cloud associated with the front will not be unduly low except possibly on eastern side of Pennines towards dawn. Apart from the front, patches of low stratus, which will not be widespread, are expected.
- Baltic Area:- Clear skies and good visibility are expected with a threat of fog in the extreme north of Denmark.
- Northern and Central France:- Broken medium and low cloud at about 3,000 ft. except at Le Havre where 10/10 medium cloud is expected.

Executive Orders

2. Minesweeping operations were ordered in areas where the movements of enemy shipping indicated that the channels chosen had been cleared of mines, and needed replenishing.

Sorties

3. The total number of sorties despatched was 50. For details of the operations see attached table.

..../ Weather Experienced

Weather Experienced

4. Western Baltic:- No cloud; good visibility; northern lights.

Moon not above the horizon.

Abortive Sorties

5. 3 sorties were abortive owing to technical defects.

Casualties

6.	Group	Type	Squadron	Minor	Category		
					A	B	E
Missing	3	Well.III	9				1
	3	Well.III	75				1
	5	Hamden	408				2
Damaged by flak	3	Well.III	57			1	
Damaged by enemy fighter	5	Lancaster	207			1	

Summary

7. 50 aircraft were despatched to lay mines in the Western Baltic. 37 were able to do this in their primary areas and a further 6 laid their mines in alternative positions.

Bombs were carried in addition to the mines by the majority of the aircraft and they were used by 12 of them. 6 attacks were made on ships but results are claimed. The other targets bombed were landing ground installations on Faño and the flare path of a seaplane station to the west of the island, the bridge at Middelfart and a bridge at Sonderburg on which a hit is claimed, the causeway at Sylt on which also a direct hit is claimed, and oil tanks at Als.

There was 1 attack by an enemy fighter which resulted in damage to our aircraft, and 1 other interception. Moderate light and heavy flak was encountered from Esbjerg, and light flak was also experienced from Spodebjerg and from flak ships off the south end of Langeland. 1 aircraft received damage from flak.

Four of our aircraft are missing. 1 was lost to light flak from a minesweeper. Another aircraft was shot down near the southern tip of Sylt, possibly by light flak, and another was probably lost to a night fighter over the Frisian Islands.

Target	Group	Aircraft Despatched	Interceptions		Casualties			No. of VC claiming to have attacked		VC failing to attack because				Did not reach E.T.
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause unknown	Target Area	Target Area	Bombed other Target	Abortive	Bombed other Target	Abortive	
MINELAYING	1	Well.II	2					2						
	3	Well.III	26		1	1 Cat.C		2 missing	21			1		2
	5	Hampden	16					2 missing	11			3		
		Lancaster	6	1		1 Cat.A			3	1		1		1
			50	1	1	1 Cat.C 1 Cat.A		4 missing	37	1		5		3

• Not fitted T.R. 1335

BOMBER COMMAND REPORT ON NIGHT OPERATIONS MAY 16/17TH, 1942.

Meteorological Advice Submitted to the Command.

1. 0915 hours. Germany:- 5/10 cloud in the area of Hamburg, Kiel and Hanover, decreasing northwards. 10/10 medium cloud and rain over the Ruhr.
France:- 10/10 medium cloud, broken low cloud and intermittent thundery rain, except in the North West where the medium cloud will be broken and low stratus will drift inland from the coastal areas during the night.
North Sea:- 10/10 thin medium cloud at 15,000 ft. Icing risk not severe.
Home Bases:- Little cloud in the East and North but bad visibility with 30-40% of bases covered by mist locally is likely. 91 Group bases threatened by an inward drift of low stratus.
- 1215 hours. Conditions at home bases rather more doubtful than at 0915 hours. Otherwise no change.
- 1715 hours. Target areas:- Little change except that the eastern mining area will be subject to medium cloud.
Home Bases:- Deterioration due to radiation fog will set in after 0200 hours and become very serious by dawn. High level stations and Lossiemouth will probably be the only ones to remain fit.
- 2045 hours. Home Bases:- 1, 4 and 5 Groups expect to have their higher level stations free from mist. 92 Group will have Heyford and Cottismore free but the rest of their stations and all those of 91 Group will be affected by low stratus from the Southwest.

Executive Orders

2. Only minelaying operations were ordered as thick cloud which was expected over Germany together with the absence of moon gave the very worst conditions for bombing.

Sorties

3. 14 sorties were despatched in all. The details of the operations are given in the table below.

Target	Group	Aircraft despatched	Laid mines in Primary Area	Laid mines in Alternative Area	Number of Bombers
MINELAYING	5	Manchester 7	6		1
		Lancaster 7	6		
		14	12	1	1

* Not fitted T.R. 1535

The other columns usually given in the table are not applicable to this night.

...../Southern Area Officer

Weather Experienced

4. Heligoland Fight:- 2 - 5/10 medium cloud; no low cloud; good visibility.
- South West Baltic:- 7 -9/10 medium cloud; low cloud with rain in patches; moderate visibility.
- Route:- Frontal conditions with 10/10 low cloud, base 1,000 ft. encountered between 3° E and 5° E. Otherwise small amounts of cloud and moderate visibility.
- Bases:- Low stratus affected the South and South West. Elsewhere there were small amounts of cloud and moderate visibility apart from local mist patches.

Moon not above the horizon.

Abortive Sorties

5. The one abortive sortie was due to a technical defect.

Casualties

6. Nil.

Summary

7. 12 of the 14 aircraft despatched on minelaying sorties laid their mines in the primary area and 1 other, who found visibility over the primary too bad to pinpoint, in an alternative.

Nothing else of importance occurred during the operations.

BC/S. 26342/2/ORS.

12.6.42.

TOP SECRETNIGHT RAID REPORT NO. 68COPY NO. 16BOMBER COMMAND REPORT ON NIGHT OPERATIONS MAY 17/18th 1942Meteorological Advice Submitted to the Command

1. 0910 hours. Conditions in the Kiel, Copenhagen, Kattegat and Heligoland mining areas have deteriorated in the past 24 hours and there is a threat of low stratus spreading from the North over the Copenhagen - Kiel area. In the Heligoland Bight there will be no cloud below 1,000 ft., but further west over the North Sea patches of fog and low stratus will be found. Over the western half of Germany there will be broken medium cloud increasing in the west, with rain in the Ruhr. In Central France there will be little or no cloud with fog and mist developing in the valleys, in northern France medium cloud with light rain and in North West France low stratus on the coast.

Home Bases :- Rain will spread from the south-west during the night but should not reach 2 and 5 Groups before 0400 - 0500 hours. Low stratus may come in from the coast over the coastal strip north of the Humber and possibly also in northern East Anglia.

- 1215 hours. Target areas:- no change except that the outlook for the Ruhr and Central France is somewhat better.

Home Bases:- The rain should be confined more to the South West than was expected at 0910 hours, and only the south west edge of 92 Group and the south of 3 Group should be affected.

- 1715 hours Northern France:- Little change. Everywhere west of Le Havre is unsuitable but east of this conditions will probably be possible.

Home Bases:- Rain is now expected to spread over the whole country but it is likely that the rain in East Anglia will not be enough to bring the cloud base down low.

Executive Orders

2. The forecasted weather at home bases was such that only 3 Group could operate, and aircraft of this Group were accordingly ordered to lay mines as a continuation of the effort of the previous two nights and also because the expected weather was most favourable for this type of operation.

Boulogne was selected as a target for freshmen as it offered the chance of breaks in the cloud and its short range made an attack on it feasible in the conditions at home bases.

Sorties

3. 88 sorties were despatched. For details of the operations see attached table.

Weather Experienced

4. East Frisian Islands:- No cloud; patches of sea fog; visibility moderate to good.

Heligoland Bight:- A bank of strato-cumulus from 2,000 - 4,000 ft; visibility good.

- S.W. Baltic:- No cloud; good visibility.

.. / Copenhagen Area

Copenhagen Area:- Much low stratus in layers with base down to 600 ft. and in places to the surface.

Boulogne:- Thick layers of cloud with the lowest layer from 5,000 ft. to 11,000 ft. visibility moderate, very dark below cloud. Moderate rime forming in cloud.

Home Bases:- Rain over the whole area spreading across East Anglia from the west between midnight and 0200 hours and dying out in 92 Group and East Anglia after 0400 hours. In these areas the cloud base was rarely below 1,000 ft.

Abortive Sorties

5. 27 sorties on this night were abortive. 21 of these (19 on Boulogne and 2 minelaying) were due to inability to locate the target, 3 to technical failures, 1 to flak, 1 to an attack by an enemy aircraft and 1 to icing.

Casualties

6.	Group	Type	Squadron	Category			
				Minor	A	B	E
Missing	3	Well.III	9				1
	3	Well.III	115				1
	3	Well.III	419				1
	3	Stirling	15				1
	3	Stirling	149				3
	3	Stirling	218				1
Damaged by Flak	3	Well.Ic.	57		1		
	3	Stirling	149	2			
	3	Stirling	218	1			
Damaged by enemy fighter	3	Stirling	218			1	
Damaged, not by enemy action	3	Well.III	75				
	3	Well.III	101	1			1
	3	Stirling	214			1	

Summary

7. Minelaying 44 of the 60 aircraft despatched on this task laid their mines in the allotted position and 4 more in alternatives. Except in the Copenhagen Area the weather was favourable for this type of operation.

7 of our aircraft are missing from this operation. Light flak was encountered both over Denmark and from ships in the mining areas, and damage was done to 3 of our aircraft. Night fighters were in action over Schleswig and Jutland and 2 attacks were made in one of which our aircraft was damaged. It is possible that 3 of our losses were due to fighters and 2 to flak. 5 of the 7 missing aircraft were to have laid their mines in the Copenhagen area of the S.W. Baltic where the weather was found to be very bad and this may have been a factor in some of our losses.

Boulogne Only 3 of the 27 aircraft despatched claim to have identified and bombed the docks, and one other bombed flak and searchlights on E.T.A. Bursts across the docks were seen by one of the aircraft which claims to have bombed. The remainder were unable to find the target owing to 10/10 cloud which the few successful aircraft went below to drop their bombs.

1 of our aircraft is missing from this operation. There was 1 attack by an enemy fighter and 2 aircraft were damaged by heavy flak which was encountered in the target area.

The Stirling despatched to drop leaflets over Vichy successfully accomplished its task.

Target	Group	Aircraft dispatched	Interceptions		Casualties			No. of A/c claiming to have attacked		No. of A/c claiming to have bombed Primary taking photos with bombing details			A/c failing to attack		Might reach E.T.	
			Attacks	Others	Due to E.M.	Not due to E.A.	Causes Unknown	Target	Target Area	Ground details	Primary Target	Points within 5 miles of Target	Reached Target	Other Target		Reached Primary Territory
LORLAIN	3	Well.Ic 2*						1								
		Well.III 27		1			2 missing	24					1			
		Stirling 32	2		1 Cat.C 3 Minor	1 Cat.C	5 missing	19				1	1	3	1	2
BOULOGNE	3	Well.Ic 12**			1 Cat.E 1 Cat.A		2						9			1
		Well.III 10*	1			1 Cat.E 1 minor	1 missing	1					6			2
		Stirling 5*						1					4			131
LEAPLETS		Stirling 1*					1									
		68	3	1	1 Cat.E 1 Cat.C 1 Cat.A 3 minor	1 Cat.E 1 Cat.C	8 missing	3	46			1	21	3	1	5

* Freshman

** Not fitted T.R. 1335

Total abortive 27

HIST SECRET

NIGHT RAID RE

No. 167543

EXTRACURRICULAR

COPY NO. 16 21 JUN 1942

TIME

BOMBER COMMAND REPORT ON NIGHT OPERATIONS 19/20TH JUNE 1942Meteorological Advice Submitted to the Command

1. 0915 hours. Target Area:- 8-10/10 strato-cumulus in the coastal areas of North West Germany, extending inland an uncertain distance. Breaks over the Ruhr but the amount of these is uncertain. In the Frankfurt - Mannheim area little or no cloud. The Baltic including area probably cloudy with rain. Central France little or no cloud but a chance of valley mist. Broken strato-cumulus cloud over the Channel Ports. Home Bases:- Fine with good visibility.
- 1220 hours. The only changes from 0915 hours are a threat of low stratus in the Heligoland area, and the probability of 5/10 cloud at about 1500 ft. between Brest and Nantes. The Northern French Coast is better.
- 1715 hours. Mannheim:- Less than 5/10 cloud for arrivals, becoming less during the night.
St. Nazaire:- The risk of sea fog is small.
Frisian Islands:- Much low cloud base about 1500 ft. with a possibility of low stratus below.
Home Bases:- Satisfactory except for low stratus in 91 Group area. 4 Group will have cumulus with tops to 12,000 ft. at take off.
- 2015 hours. Mannheim:- very promising, only 1/10 cloud at 1500 hour.
St. Nazaire:- For or low stratus possible but unlikely.
Frisians:- Threat of low stratus.
Home Bases:- Low stratus in 91 and 92 Groups but the other Groups should remain clear.

Executive Orders

Weather conditions were most favourable for an attack on South-West Germany and Mannheim was accordingly chosen as the target, owing to its importance as a centre of communications and industry.

Freshmen were sent to St. Nazaire and minelaying and leaflet dropping operations were also ordered.

Sorties

284 sorties were despatched. For details of the operations see attached table.

Weather Experienced

Mannheim:- Little thin cloud; ground haze over target; later arrivals report difficulty in seeing ground detail owing to smoke from fire. Little cloud en route.

St. Nazaire:- Small amounts of layer cloud; moderate visibility. Much low stratus and layer cloud near south coast of England en route.

Heligoland Bight:- Very little cloud; good visibility.

Home Bases:- Mostly fit all night but very low cloud and fog spread in from the coast over south and south west England.

Moon not above the horizon.

...../Photographic Evidence

Photographic Evidence

Mannheim:- 61 photographs were taken with bombing in this attack but only 4 of these have been plotted within 5 miles of the target, which indicates that very few aircraft actually reached the target area. This is borne out by the results of a subsequent daylight reconnaissance which shows only a few points of slight damage to sheds and workmen's huts near the Muhler Hafen and at Offau. Many aircraft have been plotted 15-20 miles west of Mannheim and these photographs show fires in open country. It is probable that misidentification of the target by a few of the early aircraft led the main body astray. There is no known decoy which could have contributed to this result.

St. Nazaire:- 2 of the 9 photographs taken with bombing during this raid show the docks but there are no bursts or fires to be seen.

Abortive Sorties

38 (13%) of the sorties were abortive, 26 of these were due to technical failures, 8 to inability to identify the docks at St. Nazaire, 1 to an attack by enemy aircraft, 2 to flak, and 1 to faulty manipulation on the part of the bomb-aimer.

Casualties

	Group	Type	Squadron	Category		
				Minor	A	B E
Missing	1	Well Ic	103			1
	1	Well II	12			1
	3	Well III	101			1
	3	Well III	156			1
	3	Stirling	7			3
	3	Stirling	218			1
	4	Halifax	10			1
	4	Halifax	35			2
	4	Halifax	76			1
	Damaged by Flak	1	Well II	12		
1		Well IV	142	2		1
3		Well Ic	57			1
3		Well Ic	156	2		
3		Well III	57			1
3		Well III	75	1		
3		Well III	101	2		
3		Well III	156	1		
3		Stirling	149	1		
4		Halifax	10	1		
4		Halifax	35	1		
5		Lancaster	97	1		
Damaged by Enemy Fighter		3	Well III	115		
	3	Stirling	7			1
	3	Stirling	15			1
	4	Halifax	102			1
Damaged, not by Enemy action	4	Halifax	102			1

Summary

Mannheim:- Although there was little cloud in the target area, the presence of ground haze, augmented by smoke in the later stages of the attack, made it very difficult to distinguish ground detail sufficiently clearly to obtain accurate pinpoints. 155 of the 197 aircraft which set out to attack the target claim to have done so. A considerable proportion, however, were unable to distinguish any ground detail and bombed on green flares, or on fires in the target area. Huge fires were reported by many of the

...../aircraft

3.

aircraft taking part in the attack but the photographic evidence shows that these were not on the target but in forests and open country 15 to 20 miles to the west of the target. Very few aircraft appear to have reached the target area itself and only very slight damage was done in the town. There is no known decoy in the neighbourhood where the majority of the force bombed and it is possible that the dropping of incendiary bombs by early aircraft in the wrong place led most of the force astray.

The attack on this target lasted from 0057 hours to 0215 hours but 149 of the 155 attacking aircraft dropped their bombs in three quarters of an hour between 0105 hours and 0150 hours.

11 aircraft are missing from this attack. A considerable number of night fighters were seen en route and over the target. There were 7 attacks on our aircraft, 4 of which resulted in damage. All of these occurred in Dutch coastal areas. Observations suggest that 4 of our aircraft were lost to night fighters.

There were many searchlights working in cones over the target area and co-operating with heavy flak which was moderate in intensity and accurate when firing at aircraft illuminated by the searchlights. 12 of our aircraft report flak damage. The observations made by aircraft suggest that 4 aircraft were shot down by flak, 2 in the target area and 2 over the coast, and another was shot down by ship's flak off the Dutch Coast at Schouwen.

St. Nazaire This target was attacked by 65 freshmen in conditions in which target identification was very difficult owing to ground haze. 35 aircraft claim to have identified and bombed the docks and a further 9 state that they dropped their bombs in the neighbourhood. The photographs taken with bombing, however, suggest that the raid did not achieve very successful results.

1 aircraft is missing from this operation. 4 of our aircraft were damaged by flak and the missing aircraft was probably shot down by flak over the target.

The 9 aircraft despatched to lay mines all claim to have done so successfully.

13 aircraft were despatched to drop leaflets over France. 10 did so successfully and another dropped his load over an alternative area.

BC/S. 25342/3/URS.
17th June, 1942.

Target	Group	Aircraft despatched	Interceptions		Casualties			No. of A/C claiming to have attacked		No. of A/C claiming to have bombed Primary taking photos with bombing showing			A/C failing to attack Primary		Did not reach E.T.	
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause Unknown	Target	Target Area	Ground details	Primary Target	Points within 5 miles of Target	Reached Target area	Reached Enemy Territory		
MANCHESTER	1	Well Ic 8*						8								
		Well II 19*	1	4	1 Cat AC		1 Missing	14							1	2
		Well III 2						2								
	3	Well IV 27*			1 Cat AC			26								
		Well 1423 4*						3								
		Well III 44	1	7	2 Cat AC		2 Missing	35	61	1	3		1	1	1	
		Well 423 1			1 Minor			1								
	4	Stirling 31	2		2 Cat AC		1 Missing	22					1		2	2
		Halifax 29	3	1	1 Cat AC		1 Missing	19							2	1
	5	Halifax 29			2 Minor											
Handen 150							10							2	1	3
		Manchester 13					3							1	1	1
		Lancaster 13			1 Minor		6					1		1	1	
S. W. 2. 1940	1	Well Ic 14*					1									
		Well II 14*						1								
		Well III 9*						3								
	3	Well IV 14*			2 Minor			8					1	2	1	2
		Well Ic 9*			1 Cat AC			1					2	2	1	1
		Well III 9*			2 Minor		6					1				
		Well III 9*					1								2	
		Stirling 30					5					1		1	1	
		Halifax 30					4							1	1	
		Man. 24*					1									
		Can. 1*					1									

...../Contd. over

19/20/40 Day, 1940 (Contd.)

Target	Group	Aircraft despatched	Interceptions		Casualties			No. of A/C claiming to have attacked		No. of A/C claiming to have bombed Primary taking photos with bombing showing			A/C failing to attack Primary		Did not reach E.T.
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause Unknown	Target	Target Area	Ground details	Primary target	Points within 5 miles of Target	Reached Target area	Reached Enemy Territory	
BIRMINGHAM	1	Well Ic 24*						2							
		Well III 24*						2							
		Well IV 2*						2							
SHEFFIELD	3	Handen 150*						3							
		Well Ic 1*						1							
	4	Well III 2*						5							
		Halifax 2*			1 Cat F			1							1
5	Handen 150*						2								
	Man. 24*						1								
		Can. 1*					1								

284 7 12 8 Cat AC 1 Cat E 12 Missing 35 183 8 8 8 8 2

* Not fitted with T.R. 1335

+ Personnel

Total abortive 38

MOST SECRET

NIGHT RAID REPORT NO. 7

COPY NO. 16

7546

JUN 1942

HOURS

BOMBER COMMAND REPORT ON NIGHT OPERATIONS, MAY 21/22ND, 1942. JUN 1942Meteorological Advice Submitted to the Command

1. 0915 hours. The estimated midnight position of the fronts is
 (a) warm front Bornholm - Rostock. - $56\frac{1}{2}^{\circ}\text{N } 8^{\circ}\text{E}$.
 becoming cold front to $50^{\circ}\text{N } 10^{\circ}\text{E}$ - Munich - $44^{\circ}\text{N } 10^{\circ}\text{E}$
 (b) cold front Isle of Wight - Abbeville - East of Paris and then southwards.
- Germany:- Widespread thundery cloud with some thunderstorms persisting in the north. Much medium cloud with some low cloud in the south. Between the two fronts much cloud with local thunderstorms.
- France:- west of the cold front residual convection cloud over land and variable amounts of convection cloud and some layer cloud over the coast.
- Home Bases:- Threat of low stratus near the east coast and residual thundery cloud over Central and Southern England.
- 1235 hours. Target Areas:- Thundery weather expected to be confined to eastern Germany during the night. Over the southern North Sea and North Germany west of 12°E much strato-cumulus cloud with some breaks especially in Hamburg - Kiel area.
- Home Bases:- Low stratus from North Sea not expected to spread inland. Slight rain with cloud base at 1,000 ft. probable.
- 1520 hours. Mindelaying areas:- Suitable with little cloud in the Baltic and well broken cumulus along the west coast of France.
- Home Bases:- Low cloud expected to come in from the coast with base at 500 - 1,000 ft. Clear skies are expected over the Midlands and the south and south-west should be good for diversions.

Executive Orders

2. Thundery conditions and heavy storms made it very difficult to find a target suitable for bombing. A number of aircraft were ordered to lay mines in the best area from a weather point of view. This number was kept low in order not to incur a large number of diversions which were expected owing to fog predicted at the bases.

Sorties

3. 48 sorties were despatched. For details of the operations see table below.

...../over

Target	Group	Aircraft Despatched	Casualties		Laid Mines in Primary Area	Laid mines in alternative area	Abortive
			Enemy Action	Other Causes			
MINE LAYING	3	Well Ic 5	1 Cat AC		1		
		Well III 29 Stirling 14.	1 Minor	1 Cat B	8 9	1	29
		48	1 Cat AC 1 Minor	1 Cat B	18	1	29

Weather Experienced

West Coast of France:- 10/10 cloud at 5,000 - 1,000 ft. with rain and poor visibility to the south.

Route:- Much low cloud, very low at times over England, some rain.

Home Bases:- Rain at times over whole area with low cloud and fog spreading from the S.W.

Abortive Sorties

29 sorties were abortive, in all cases owing to an inability to pinpoint owing to bad visibility.

Casualties

	Group	Type	Squadron	Category
Damaged by Flak	3	Well Ic	57	Minor A AC B
	3	Stirling	7	1
Damaged, not by Enemy Action	3	Well.III	57	1

Summary

48 aircraft of 3 Group set out to lay mines off the west coast of France. Weather conditions were unfavourable with 10/10 low cloud and poor visibility and as a result only 18 aircraft were successful in carrying out their task, 1 laid mines in an alternative area.

Heavy and light flak, slight to moderate in intensity, was encountered along the French coast. Two of our aircraft received damage from this cause.

NIGHT RAID REPORT NO. 71

107344
INSTRUMENT ROOM
COPY NO. 16

BOEHR COMPLAND REPORT ON NIGHT OPERATIONS, 22/23RD MAY 1942

1942 21 JUN 1942

HOURS

A.M.

Meteorological Advice Submitted to the Command

1. 0915 hours. Occluded front expected from south to north at 50 - 100 miles off the east coast at midnight.
 Target Areas:- North Germany including the Baltic Coast, Hamburg, Hanover and Wilhelmshaven - small amounts of cloud and some ground haze. Westwards from this area increasing medium cloud, with thundery cloud over the Low Countries. Local thunderstorms expected over Southern Germany. Eastern and Central France variable amounts of cloud and local thunderstorms. Along the west coast of France broken layer and convection cloud.
 Home Bases:- Residual thundery cloud with fog developing in any cloud clearances.
- 1245 hours. Target Areas:- No change.
 Home Bases:- Thundery rain may persist well into the morning over much of the home base area with lifting and breaking of the cloud in the west.
- 1710 hours. Western Baltic:- Conditions good apart from threat of sea fog or low stratus.
 St. Nazaire:- 2-5/10 cloud but may be 10/10 if front has not passed.
 Home Bases:- In 1 and 4 Groups skies should clear soon after take-off. 3 Group thunderstorms during the first half of the night, then fog or mist.

Executive Orders

2. Very cloudy conditions over most of the Continent made night bombing unsuitable. A mining operation in Western France was ordered and a few bombing sorties were despatched to the docks at St. Nazaire, timed so as to coincide with the arrival of the minelaying aircraft.

Sorties

3. 58 sorties were despatched. For details of the operations see attached table.

Weather Experienced

4. Baltic:- No cloud; good visibility.
 North Sea:- 10/10 cloud with rain in the west breaking to the east of 7° E
 St. Nazaire:- 8-9/10ths cloud en route and over the target.
 Home Bases:- Low stratus and fog began to affect home bases at about 2400 hrs. thickening and becoming widespread during the night. Some stations in 3, 4 and 91 Groups remained fit all night.

Photographic Evidence

5. One photograph was taken with bombing by an aircraft claiming to have attacked St. Nazaire. It has been plotted at Vannes, 40 miles from the target.

.../Abortive Sorties

Abortive Sorties

6. 40 sorties were abortive this night. 14 aircraft of 1 Group returned early owing to a recall signal. 24 of the aircraft attacking St. Nazaire were unable to see the target. 2 aircraft of 5 Group were unable to carry out their allotted tasks owing to technical failures.

Casualties

7.

	Group	Type	Squadron	Category		
				Minor	A	A/C B
Damaged by flak	5	Lancaster	207		1	
Damaged, not by Enemy Action	5	Lancaster	61		1	
	5	Lancaster	207		1	

Summary

8. 31 aircraft set out to lay mines. The 15 Wellingtons of 1 Group were recalled early owing to deterioration of weather conditions at their bases. 1 aircraft did not receive the signal and laid its mines successfully. 12 of the 16 Lancasters from 5 Group laid their mines in the primary area and 2 others in alternatives.

Only 3 of the 27 Halifaxes which were despatched to St. Nazaire saw enough ground detail to enable them to drop their bombs. The one photograph which was taken with bombing shows that 1 at least of these aircraft had not identified the target correctly. The remainder had to abandon their task owing to cloud.

EC/S.26342/3/ORS.

8th June, 1942.

Target	Group	Aircraft despatched	Interceptions		Casualties			No. of A/c claiming to have attacked		No. of A/c claiming to have bombed Primary taking photos with bombing, showing			A/c failing to attack		Primary Territory		Did not reach E.T.
			Attacks	Others	Due to E.A.	Not due to E.A.	Cause unknown	Target	Target area	Ground details	Primary Target	Points within 5 miles of Target	Bombed other Target	Abortive	Bombed other Target	Abortive	
DUNKELBERG	1	Well. II 2*															2
		Well. III 7															6
		Well. IV 6*															6
	5	Lancaster 16			1 Cat. A	2 Cat. C		12							2	1	1
ST. NAZAIRES	4	Halifax 27	1					3	1				24				137
		58	1	1	1 Cat. A	2 Cat. C		16					24	2	1	15	

* Not fitted F.R. 1335

Total abortive 40

MOST SECRET

NIGHT RAID REPORT

NO.

AIR MINISTRY

NO. 7275452

COPY NO. 16

BOMBER COMMAND REPORT ON NIGHT OPERATIONS 26/27th May, 1942.

31 JUN 1942

Meteorological Advice Submitted to the Command

1. 0915 hours:- Target areas:- In North Germany west of 10° E much low cloud with occasional rain. Over the remainder of Germany broken medium cloud and variable amounts of residual convection cloud. In north east Germany small amounts of cloud. In France much low cloud in the north becoming less to the south.
- Home Bases:- Much low cloud all night and rain at times.
- 1715 hours:- E. Denmark:- Well Broken cloud.
- Route:- Heavy rain and clouds of great vertical extent near the east coast and west of Denmark.
- Home Bases:- Raid throughout the area in the evening but conditions will improve by 2200 hours in 3 and 5 Groups and from then on bases will remain fit all night.

Executive Orders

2. Weather conditions were poor and aircraft and crews were saved in order that resources might be built up for a bombing operation on a very large scale. 4 Lancasters, however, which had the speed and range to reach a target in the area fit for minelaying during the hours of darkness were despatched to the Baltic.

Sorties

4 sorties were despatched. 2 of these laid their mines in the primary area, one had to return early owing to engine failure, and the fourth found 10/10th cloud up to 16,000 ft. with icing in the target area and accordingly brought its mines back to base.

There were no casualties and no other incidents of importance occurred during the night's operations.

BC/S. 26342/3/ORS.
17th June, 1942.

BOMBER COMMAND REPORT ON NIGHT OPERATIONS, 29/30th MAY, 1942

Meteorological Advice Submitted to the Command

1. 0920 hours. Estimated midnight position of minor cold front is N.E. Scotland - 55°N. 7°E. then southwards decreasing in intensity. Along this front a belt of convection cloud expected and some medium cloud in its vicinity.
- North Germany:- Broken medium cloud and also broken convection cloud.
- West Germany:- Some broken medium cloud and well broken convection cloud.
- South Germany:- Cloudy with occasional rain.
- North East France:- Little or no cloud, good visibility.
- North West France:- Well broken cloud; moderate to good visibility.
- Home Bases:- Cloud dispersing and visibility good.
- 1220 hours. Hamburg:- Tall convection cloud persisting into the night.
- Cologne:- Considerable convection cloud probable.
- 1530 hours. S.W. Coast of Norway:- Much strato-cumulus and convection cloud, with some breaks, especially off the coast.
- 1715 hours. Paris:- Patches of residual convection cloud, lessening during the night.
- Mine-laying Areas:- Large amounts of dying convection cloud, base not below 2,000 ft.
- Home Bases:- Thundery showers persisting locally until midnight.

Executive Orders

2. The command was standing by for an operation on an exceptionally large scale but conditions over targets in Germany were not sufficiently promising to justify its being carried out this night. Advantage was accordingly taken of the full/moon to despatch a force of about 80 aircraft to attack the Gnome at Rhone Works at Gennevilliers as this target was in an area in which favourable weather conditions were expected.

Sufficient aircraft to lay 100 mines were also sent to replenish the North Western Minefields and a number of freshmen were given two Channel Ports at short range as their targets.

Sorties

3. The total number of sorties despatched was 152. For details of operations see attached table.

Weather Experienced

4. Paris:- Varying amounts from 0-8/10 of layer cloud; visibility good.
- Cherbourg:- 4-6/10 cumulus and 8/10 layer cloud above with tops at 8,000 ft.

.../Mine-laying

Mineslaying Areas:- No cloud in Heligoland Bight but 10/10 from surface up to 1,000 ft. off Danish coast and eastwards.

Routes:- Patches of cumulus dispersing in Western North Sea, then fine with good visibility. Over Channel and route to Paris showers with cumulonimbus tops to 15,000 ft; good visibility; some icing.

Home Bases:- Thundery showers persisted until well after midnight with sporadic rain later in the night in 1 and 5 Group areas with cloud base falling temporarily below 1,000 ft; visibility generally good except in showers, but mist developed towards dawn in 1 Group's area.

Moon above the horizon, 100% of full.

Photographic Evidence

5. Paris:- 24 photographs were taken with bombing during this attack. 6 of these show the target and a further 14 the target area, which suggests that a high proportion of the force concentrated its attack in the target area.

A subsequent reconnaissance confirms that considerable damage was done in the target area. In the Gnome et Rhone works 12 buildings were damaged, but only in the case of two large buildings is the damage severe. 2 large buildings in the works of the Societe Alston have been severely damaged and 2 others have been damaged to a lesser degree. One large building in the Goodrich Rubber works has been almost completely destroyed and 2 smaller ones completely so. The largest building in the factory has been severely damaged by two direct hits and all the other buildings have suffered from blast. The Boiler House at the Power Station has been severely damaged by more than one direct hit and one of the chimneys has collapsed. The Generating House has been severely damaged by blast. Three other groups of industrial buildings in the vicinity have also suffered substantial damage.

The one photograph taken with bombing at Cherbourg showed the docks.

Abortive Sorties

56 (37%) of the sorties on this night were abortive. 48 (11 on Paris, 13 on Dieppe, 22 on Cherbourg, and 2 mineslaying) were due to inability to locate the target owing to cloud, 7 to technical defects, and in 1 case the reason was not given.

Casualties

	Group	Type	Squadron	Category			
				Minor	A	B	E
Missing	1	Well IV	460				2
	3	Well.III	156				1
	3	Well.III	419				1
	3	Stirling	15				1
	3	Stirling	218				1
Damaged by Flak	3	Well.Ic	57		1		
	3	Well.III	115	1			
	3	Well.III	156			1	
	3	Stirling	15	2			
	3	Stirling	149	1			
	3	Stirling	218	1			
	4	Halifax	10	1			
	4	Halifax	35	1			
	4	Halifax	76	3			
	4	Halifax	102	1			
	5	Lancaster	44	3			
	5	Lancaster	83	1			
5	Lancaster	97			2		
5	Lancaster	207	1				

...../over

3.

Damaged by enemy Fighter	Group	Type	Squadron	Minor	Category		
					A	AC	B E
	3	Stirling	149	1			
	3	Stirling	218	1			

Summary

Gennouvilliers:- 77 aircraft set out to attack industrial targets in this suburb of Paris. Varying amounts of cloud were encountered but 54 aircraft claim to have bombed the target or its near neighbourhood. A few aircraft of 4 and 5 Group report difficulty in precise identification of the target owing to searchlight dazzle.

The photographs taken during the raid and on the subsequent reconnaissance show that a large amount of damage to important industrial works was done. The Gnome et Rhone Works, which are the most important of this group of factories, have not, however, suffered decisive damage.

All except 2 of the 54 aircraft which claim to have bombed the target, did so in the 65 mins from 0220 hours to 0325 hours.

There was moderate heavy flak and intense light flak over the target and 18 of our aircraft report flak damage. No attacks were made on any of our aircraft engaged on this raid and it is therefore possible that all of our 5 missing aircraft were lost to this cause. Only 2, however, were seen by other aircraft to be shot down.

Dieppe:- Only 1 of the 17 aircraft attacking the docks at this French port claims to have identified them with certainty and bombed them. 2 others state that they dropped their bombs in the vicinity of the target but the majority were forced by thick cloud to abandon their task.

Cherbourg:- 31 aircraft set out to attack the docks at this town. 6 identified and bombed their target and 1 other claims to have dropped his bombs in their neighbourhood. The remainder of the sorties were abortive as the crews found the cloud conditions too bad for accurate target identification.

1 of the aircraft is missing. The cause of loss is not known.

Mincelaying:- 24 aircraft set out to lay mines on this ^{night.} 17 of these laid their mines in the areas allotted to them and 23 more in alternative areas.

1 of these aircraft is missing, probably lost to enemy fighter action. 3 report attacks by enemy aircraft in two of which ^{damage} was sustained by our aircraft.

Leaflets:- The 3 aircraft detailed for this task were successful in accomplishing their mission.

Target	Group	Aircraft despatched	Interceptions		Casualties			No. of A/C claiming to have attacked		No. of A/C claiming to have bombed Primary taking photos with bombing showing			A/C failing to attack Primary			
			Attacks	Others	Due to E.L.	Not due to E.L.	Cause Unknown	Target	Target Area	Ground Details	Primary Target	Points within 5 miles of Target	Bombed other Target	Abortive other Target	Aborted other Target	Aborted E.T.
TOWN & BRIDGE DUNDEE DUNDEE DUNDEE	1	Well. Ic 4 *						3					1			
		Well. II 5 *						5								
		Well. III 4 *						3					1			
		Well. IV 8 *						2					4			
	3	Well. III 5			1 Got A/C			2					1			
		Well. III 5			1 Minor			3	1	24	6	14	1			
	4	Stirling 9		1	1 Minor			6	1				1			1
		Suffox 20		1	5 Minor		1 Missing	9	5				1	3		1
	5	Sturpden 3 *						2					1			
		Lancaster 14		1	2 Got A/C 5 Minor			11	1				2			
DUNDEE	3	Well. Ic 8*					1	2				5			141	
		Well. III 9*										9				
DUNDEE	3	Well. Ic 4*						1				3			1	
		Well. III 10*							1	1		9				
		Stirling 12*					1 Missing	4				7				
DUNDEE	5	Sturpden 5*					2					2			1	
		Well. II 2 *	1													
		Well. IV 1 *						1								
DUNDEE	3	Stirling 15	2	1	2 Minor		1	Missing							1	
		Lancaster 5						1				3	1			
		Sturpden 1 *										1				
DUNDEE	5	Manchester 3*									3					
			152	3	4	3 Got A/C 1 Got A/C 18 Minor	7 Missing	53	31			5	51	1	4	
												Total Abortive 56				

* Not Fitted T.R. 1335

+ Pushover

MOST SECRET

NIGHT RAID REPORT NO. 74 P M

COPY NO. 15

NO.
DEFENSE WAR ROOM
15 JUL 1942
HOURS

BOMBER COMMAND REPORT ON NIGHT OPERATIONS, 30/31st MAY, 1942.

142

19 JUL 1942

Meteorological Advice Submitted to the Command

1. 0920 hours. Germany:- Much thundery cloud with some breaks over the North West, decreasing southwards and dispersing in the middle Rhine to relatively small amounts during the night.
France:- Convection cloud dispersing to small amounts early in the night. Well broken layer cloud in the west.
Home Bases:- Convection cloud decreasing; local thundery showers.
- 1300 hours. Cologne:- Residual cloud tending to clear, but probably only to about 7/10.
North West Germany:- More cloud, probably 8/10.
Home Bases:- 1 Group may have 50% of their bases unfit but in general only a few stations unfit owing to ground fog.
- 1700 hours. Cologne:- Broken cloud with some large breaks.
Route:- Much cloud and occasional thunderstorms going out improving somewhat for return.
Home Bases:- Conditions at take-off generally very good but local interference owing to thunderstorms possible. On return local visibility troubles possible, particularly in 1 and 5 Groups but even then no more than 25% of the bases will be affected.

Executive Orders

2. It had been decided to deliver an attack of exceptional weight on an important German industrial city. Full moon, good base conditions, and the fact that the necessary forces were standing by made it imperative to carry out this attack with the least possible delay. Weather conditions at Cologne promised to be more suitable for this attack than those at any other target suitable for this operation and it was accordingly selected as the night's target. Later weather forecasts confirmed this choice and it appeared that there was more than an even chance of conditions being good for a very large scale attack.
3. The strongest night flying force which could be raised by 2 Group was employed on complementary operations against the night fighter aerodromes near the routes to and from the target.
4. A few aircraft of Flying Training Command took part in the attack on Cologne and assistance to Bomber Command in the intruder operations was afforded by Army Co-operation Command. Fighter Command co-operated also by intruder operations to supplement those of the aircraft working under Bomber Command's control.

Sorties

5. The total number of sorties despatched on this night was 1096 of which 1046 were detailed to attack Cologne.

For details of the operations see the attached table.

...../6.

6. 101(9.2%) sorties were abortive. The reasons were as follows:-

	Cologne	Intruders
Technical failures	70	1
Failure to locate target	.	7 (6 on Vectors A/D 1 on Trenton A/D)
Icing	3	
Misunderstood recall signal	2	1
Enemy Fighters	1	
Flak	1	
Illness	1	
Too late	1	
Faulty bomb selection	1	
Cause not stated	12	

Moon

7. The moon was above the horizon and 99% of full during these operations.

Weather at Home Bases

8. Most home bases were serviceable throughout the night. There were showers early in the night in the Midlands, but these were never widespread and the base of cloud was not below 1,000 ft. Visibility was generally moderate but towards dawn it was reduced to 2,000 - 4,000 yds. in 1 and 5 Group's areas.

COLOGNE

Plan of Attack

9. The attack on Cologne was planned to last for 1 hour 30 mins. beginning at 0055 hours. All the T.R. aircraft of 1 Group and 3 Group were to bomb in the first 15 minutes of the attack and the heavies of 4 and 5 Groups in the last 15 minutes. The remaining aircraft were to spread out their attack as evenly as possible over the intervening period of one hour. The bomb load was to consist of the maximum economical number of 41b. incendiaries made up with the larger types of H.E.

10. The route to the target was to be direct. The aircraft were then to go approximately S.S.W. for about 20 miles and to return parallel to their outward track. All aircraft were to leave the target area immediately after bombing, increasing speed and losing height as they did so.

11. Three separate aiming points were given. 1 and 3 Groups and the aircraft operating with them were given one in the centre of the town; 4 Group and 92 Group were given one about 1 mile to the north of it and 5 and 92 Groups about 1 mile to the South of it. Crews were however given instructions to drop their bombs between rather than in existing fires

Weather

12. Over the target the only cloud was small amounts of cirrus. En route there was 8 - 10/10 cloud in layers over the North Sea with cumulonimbus in places in which clear ice formed and considerable static was encountered. 4 Group in particular met bad icing conditions. The cloud broke inland over Holland, decreasing to nil.

Success of Attack

13. 898(86%) of the 1046 sorties despatched claim to have attacked the target area. Many of the aircraft of the first wave report that they were considerably assisted in navigating to the target area by T.R. 1335 but that they were able to recognise it visually without difficulty when they got there. The aircraft of the two remaining waves found considerable

fires burning and were able to recognise the target from then without any difficulty. All aircraft which bombed after 0115 hours said that large and growing fires were raging, and some crews saw these from as much as 150 miles on the return journey.

14. In order to reduce the possibility of one aircraft taking a photograph with the flash bomb dropped by another, only 246 cameras were carried on this raid. 45 photographs showing ground detail were taken. This sample represents 5% of the force claiming attack and is so small that only very tentative conclusions as to the success of the raid can be drawn from them. 32 of the photographs have been plotted within 5 miles of the Neumarkt, which was the middle aiming point. Most of these were taken during the early part of the raid and the accuracy probably improved as the raid progressed and the fires got a good hold. There are also about 100 photographs which show tracks of considerable fires and these were almost certainly all taken over Cologne. This evidence, although somewhat scanty, makes it clear that a considerably larger proportion than usual of the attacking force found and bombed the target.

15. The aircraft claiming to have bombed Cologne dropped 1455 tons of bombs, made up of 540 tons of H.E. and 915 tons of incendiaries. From the distribution of night photographs taken with bombing it is estimated that at least 60% of this was dropped more or less evenly over an area of 3 miles radius from the Neumarkt. This gives an average density of 31 tons per square mile over the whole area. The figure was, however, probably somewhat greater than this since it is likely that the night photographs give a pessimistic picture of the raid's accuracy.

16. Subsequent daylight reconnaissance showed that the raid was a complete success. The pilot of a Mosquito which was over the city shortly after dawn the next morning stated that there were numerous fires in the central city and surrounding residential district on the west bank of the river, and also several large fires in industrial and residential districts on the east bank of the river. The smoke from these fires covered the city and rose to a height of 15,000 ft., effectively preventing any photographs from being taken.

17. Later reconnaissance sorties have obtained photographs which show that the damage is heavy and widespread and that it is on a much larger scale than any previously inflicted on a German city, 600 acres having been completely destroyed. About half of this area is in the centre of the city. There is, however, no considerable area which is free from incidents and much residential and industrial property in the suburbs has been seriously damaged by fire and H.E. It is estimated that well over 3,000 houses have been made totally uninhabitable and over 250 factory buildings destroyed or seriously damaged. These factories include metal works, rubber works, blast furnaces, chemical works, a large oil storage plant, railway workshops and manufacturers of submarine engines, accumulators and batteries for submarines, undercarriages, rolling stock, machine tools, steel rope, dyes and glassware. There was also sufficient damage done to the railways themselves to cause serious, if temporary, interruption of traffic.

18. Public buildings which have been destroyed include Police headquarters, a post and telegraph office and a number of churches. The administrative buildings of the railways and the Post Office have been severely damaged and also the Burger hospital. The Cathedral appears from the photographs to have escaped damage.

19. Intelligence reports state that the damage to the administrative buildings of the railways have made them completely useless. It is said that the destruction of records caused a more serious dislocation of traffic than damage to an important railway junction would have done. It was four days before any goods trucks arrived at Basle from Cologne and by the 6th June only one instead of six passenger trains were running between the two cities and travel on this was subject to very strict control. Further reports also state that following the raid the local authorities were completely unable to cope with the situation. Emergency feeding, first aid, and evacuation measures all broke down completely and some people had to walk over 30 miles to find lodging. It is said that 200,000 people have had to be evacuated, the majority to Munich and Stuttgart.

20. The amount of useful damage done on this raid undoubtedly exceeded very considerably that done on any previous raid by Bomber Command.

21. The timing of the attack adhered fairly closely to that laid down in the instructions. The whole attack lasted from 0038 hours (17 minutes early) to 0310 hours (45 minutes late). Only 38, however, of the 898 aircraft claiming to attack the city bombed outside the allotted period. Of these 21 were early and 17 late. There was, however, a certain amount of overlapping of the three waves and in particular a considerable proportion of the third wave was early, some aircraft as much as 20 mins.

Other Targets Attacked

22. 14 aircraft which were unable to reach the target area, mainly owing to technical defects, but in two cases owing to attacks by enemy fighters, bombed alternative targets. Most of these were aerodromes in the Low Countries but Aachen, Munchen Gladbach and Lusteldorf were also bombed by single aircraft and another which was unable to climb sufficiently to reach the prescribed minimum height for bombing Cologne, dropped its bombs on a built up area 10 miles west of the target.

Cost

23. 40 (3.8%) of the aircraft despatched to attack Cologne are missing and 113 suffered damage to varying extents, 12 of them having to be written off, and 33 being seriously damaged (Cat. B and Cat. AC). 82 of the damaged aircraft were hit by flak and 12 by enemy fighters. The damage to the remaining 19 was not due to enemy action, and this figure includes 2 aircraft destroyed in a collision over this country. 29 of our aircraft in all report attacks by enemy fighters.

24. The following is a comparison of the losses, flak damage, and attacks by enemy aircraft, on this raid and on the previous raids on Cologne for the period August 1941 - April 1942.

	Sorties	%age missing	% damaged by flak	% attacked by enemy aircraft
30/31st May, 1942	1046	3.8%	8.1%	2.8%
August 1941 - April 1942	1364	3.5%	8.6%	2.3%

25. These figures show that the percentage missing is slightly higher than average, but the average missing rate for attacks on West Germany under conditions of moon and no cloud is 4.6% for the period June 1941 - March 1942. Thus losses on the present occasion were below normal due no doubt to the heavy concentration achieved.

26. In the target area the flak defences were moderate in their intensity during the early part of the raid. They were working in close co-operation both with cones of searchlights and with night fighters, but it is not possible from the reports available to determine the precise roles played by each of these two forms of defence. Almost all the aircraft which attacked after the raid had been in progress for about $\frac{3}{4}$ hour report that the flak defences had become extremely weak and appeared to be confused. Reports made by returning aircraft indicate, however, that an aircraft was shot down by flak over the target every 7 or 8 minutes throughout the whole raid. From this, and also from the reports of a few aircraft which were heavily engaged, it would seem that the enemy defences, realising the magnitude of the attack, concentrated on single aircraft. Naturally, to those not receiving this concentrated attention the defences would appear weak. It accordingly appears that the large number of aircraft over the target did not have the effect of preventing the enemy's location devices from selecting and following single targets.

"As the majority of the aircraft which were heavily engaged or seen shot down by flak over the target were held in searchlights, it is possible on the other hand that aircraft were picked up by these fortuitously and then followed visually".

27. The enemy's fighter effort was considerably larger than usual particularly in the coastal area. There is no indication that the defences outside the target area were below normal at any time. The enemy concentrated his fighters in the air near the coastal areas and in the neighbourhood of the target, and apparently there were more of them in the air during the return journey of our aircraft. The attached map shows the positions and times at which attacks by enemy fighters on our aircraft were reported, and also the times of intruder activity. The data shown on this map indicates that the enemy defences were slightly more effective during our bomber's return than they had been during their flight to the target.

28. The main searchlight belt was reported as absent, but searchlight activity was intense in the target area, particularly in the early stages of the raid, and also along the Rhine. Activity was also considerable in the Rotterdam-Over Flakkes area and around Antwerp. The majority of the aircraft seen shot down by flak were held in searchlights.

29. There were over 200 reports of aircraft seen shot down. In many cases definite details are given by numerous aircraft of the loss of a British aircraft at the same moment of time. These reports have been carefully examined and coincident observations as far as possible eliminated. This process leaves a figure of 62 apparently independent observations, including at least one collision over the target. In all *W. R.A.F.* aircraft were lost over enemy territory on this night. In addition aircraft attacking Cologne claim to have destroyed 4 enemy aircraft, to have possibly destroyed one other, and to have damaged 2. Fighter Command claim to have destroyed 1 and damaged 4 enemy aircraft over the Continent. This leaves 13 observations unaccounted for, some of which may have been due to enemy aircraft falling victims to their own defences, but most of them no doubt to errors as to the times and places of the occurrences observed.

30. These observations indicate that 22 aircraft were lost over the target area and that the causes were as follows:-

Flak	16
Enemy Fighters	4
Collision	2

Losses to flak and enemy fighters outside the target area were probably in the ratio of 1:2.

31. In connection with the report of the collision it should be pointed out that a few aircraft did not carry out their instructions to leave the target area immediately but flew around watching the progress of the raid for some period. This would increase the possibility of an accident of this nature.

32. The percentage losses suffered by each of the three waves of the attack were as follows:-

1st Wave	4.8%
2nd Wave	4.1%
3rd Wave	1.9%

There are two possible causes for the low percentage loss of the 4 engined aircraft forming the third wave of the attack. The rate of loss over the target remained fairly constant throughout the attack but the number of aircraft attacking per minute was highest when these aircraft were making their attack. The percentage loss would thus be lower. Also it would appear that our four engined aircraft were less vulnerable to attacks by enemy aircraft as the following figures suggest:-

	Sorties	Missing	Attacked
Four engined aircraft	292	6(2.1%)	10(3.4%)
Two engined aircraft	754	34(4.5%)	19(2.5%)

...../This shows

This shows that, in spite of a greater percentage of reported attacks by enemy aircraft, the percentage of 4 engined aircraft missing is lower than the average for the night. Another indication that these aircraft are better able to defend themselves against enemy fighters is that 3 of the 4 claims to have destroyed an enemy night fighter were made by four-engined aircraft.

33. The losses of 91 and 92 Groups on this night were 3.3 which is appreciably below the percentage (6.1) sustained by the operational groups. The majority of the aircraft of these groups were piloted by instructors, but a proportion were flown by pupils. In 91 Group the figures for sorties and missing by pupils and instructors were:-

	Sorties	Missing
Instructors	208	7 (3.4%)
Pupils	49	1 (2.0%)

In view of the small numbers involved it cannot be said that there is any significance in this difference in percentages.

Summary

34. This attack was considerably more successful than any previous one against the same target. At least 60% of the force which set out attacked the target area. This is a considerably higher figure than obtained on previous raids. The amount of useful damage done was also very much more than that done on previous raids even when the number of sorties is taken into account. It can therefore be said that the success per sorties of this raid was much above average. On the other hand the cost per sortie of the operation was approximately average as regards numbers of aircraft lost or damaged. Conditions were favourable for a high loss rate on this night but losses were minimised by the very high concentration achieved. They were, however, not much below normal due partly to the ease of interception by cats eye fighters under conditions of full moon and high concentration. It is important to note that, in spite of the concentration of our aircraft the enemy's flak defences at the target were able to concentrate on single aircraft, although the losses of the last wave of aircraft were very low, which suggests that the enemy's defences were by that time overwhelmed. The enemy night fighter effort was considerably greater than usual, and in spite of our intruder activity he succeeded in putting a large force of night fighters into the air.

INTRUDERS

35. 34 aircraft of 2 Group and 16 aircraft of Army Co-operation Command operating with them set out to bomb the enemy's aerodromes during this raid in order, as far as possible, to keep the enemy's night fighters on the ground. 35 of these successfully accomplished their allotted task, bombing the runways at all aerodromes and the aerodrome buildings as well at Venlo, Twente and Bonn. The only aerodrome which was not attacked by the majority of the force despatched to attack it was Vechta. Only 1 of the 9 aircraft despatched to this target was not prevented from carrying out its task by unfavourable weather conditions. There was much low cloud and fog over the East Frisian Islands on the route of these aircraft.

36. Fighter Command also carried out intruder operations which were arranged to dovetail in with those of Bomber Command. The times at which the various aerodromes were bombed or patrolled were as follows:-

Juvincoort	2355 - 0018 hours (B)
St. Trond.	0008 - 0032 hours (B)
	0015 hours (B)
	0140 - 0335 hours (P)
Bonn	0034 - 0115 hours (B)
Gilze Rijen	0000 - 0050 hours (P)
	0120 - 0145 hours (P)

...../Eindhoven

Eindhoven	2355 - 0040 hours	(F)
Venlo	0002 - 0036 hours	(B)
	0130 - 0140 hours	(F)
	0200 - 0225 hours	(F)
Deelan	0000 - 0030 hours	(F)
Seesterburg	2355 - 0010 hours	(F)
	0100 - 0200 hours	(F)
Schipel	2350 - 0005 hours	(F)
Twente	0024 - 0110 hours	(B)
	0145 - 0205 hours	(F)
Leeuwarden	2325 - 0035 hours	(F)
Vachta	0315 hours	(B)
Ardorf	0058 hours	(B)

(B) By Bomber ~~of~~ Army Co-operation Command aircraft

(F) By Fighter Command aircraft

This activity is shown on the attached map.

37. In addition to the above, two unidentified aerodromes near Twente and one near Brussels were bombed.

38. One aircraft of Bomber Command attacking Juvincourt claimed to have dropped its bombs on an aircraft which was landing. Fighter Command aircraft claim to have destroyed 1 and damaged 4 enemy aircraft.

39. It is impossible to assess the extent to which these operations reduced the enemy's night fighter effort but he was able to put a considerable force of night fighters into the air, particularly during our bomber's return journey when the intruder effort was considerably less.

40. 1 aircraft of Bomber Command, 1 of Army Co-operation and 1 of Fighter Command are missing from these intruder operations.

BC/S.26342/ /CRG.
15th July, 1942.

30/31st MAY. THOUSAND BOMBER RAID ON COLOGNE

Appendix

TARGET	GROUP	TYPE	NO OF SORTIES	A/C CLAIMING TO ATTACK		A/C FAILING TO BOMB PRIMARY				NOT over Enemy Territory	RESULT NOT KNOWN	CASUALTIES				INTERCEPTIONS	
				Primary	Primary Area	REACHED TARGET AREA		OVER ENEMY TERRITORY				Missing	Damaged by Flash	Damaged by Enemy Aircraft	Not due to Enemy Action	146 Attached	Not Attached
						Bombed other Target	Abortive	Bombed other Target	Abortive								
COLOGNE	1	Wellington Ic	24*		22					1		1	1 E 2 m	2 AC		1	
		Wellington II	36*		29					4		3	2 m		1 E+		1
		Wellington III	18		16					1	1	1	1 AC	1 m	1 E+	1	
		Wellington III	68*		62			2		2		2	4 m		1 AC	1	1
		Wellington 42)	5*		5												
	91 Group attached to 1 Group	Wellington II	26*		21					4		1	1 AC 1 m				
		Wellington III	1*		1												
	3	Wellington Ic	31*		32					3		1	3 A 1 m			3	1
		Wellington III	91		77		1		2	6		5	1 AC 1 m		1 E	6	6
		Wellington 42)	6		5							1					
	Flying Training Command attached to 3 Group	Stirling	69 19*		77					3	10	2	6 m	1 B	1 E 1 B	4	4
		Wellington Ic	4*		3							1					
	91 Group attached to 3 Group	Wellington Ic	17*		15				1	1							
	92 Group attached to 3 Group	Wellington Ic	20*		7							3	1 m	1 m	2 E		
	4	Wellington Ic	7*		2				1	3		1					
		Wellington II	9*		3					4		2					
	5	Wellington Ic	99 32*		108		2	3	2	12	1	3	1 AC 1 m	1 A	1 E 1 B	4	1
		Manchester	34*		31				1	2			1 m		1 E	1	2
		Manchester	46*		35				1	6		4	1 B 1 AC 1 m		1 B		2
	91	Lancaster	53 14*		67				1	3		1	4 m	1 m	1 B 1 AC	2	5
Wellington Ic		21*		21								3 m	1 B		1		
92	Wellington Ic	19*		168		7	3	7	7		7	1 B 10 AC 1 A 8 m	1 E 1 B 1 AC	1 B 1 AC	4	5	
	Manchester	43*		42				1	1		1	1 m		2 E			
TOTAL	Wellington Ic	43*		41					1		1	1 AC 4 m	1 m	1 B	1		
			1096	35	898	3	14	17	72	2	42	12	12				
2 Group	Bombardier	9*		7					1		1						
1	Bombardier	8*		6				1	1								
Army	Bombardier	6*		6													
Cooperation	Bombardier	10*		7		2						1 m					
Command	Bombardier	9*		1		1			1		1						
		8*		6													
			1096	35	898	3	14	17	72	2	42	12	12	10 E 4 B 3 AC 4 m	10 E 4 B 3 AC + 10 AC	29	30

* Not fitted TRNG

Total Abortive 101

10 E
4 B
3 AC
4 m

10 E
4 B
3 AC
+ 10 AC

BOMBER COMMAND REPORT ON NIGHT OPERATIONS 31st MAY - 1st JUNE, 1942

Metereological Advice Submitted to the Command

1. 0910 hours. Germany:- Hamburg and the Lubeck - Rostock area; broken medium cloud, though the amounts may be large.
- N.W. France:- Broken low and medium cloud.
- Mine-laying Areas:- Fine in the Baltic; threat of low stratus in Heligoland Bight.
- Home Bases:- Threat of valley fog and also of local thundery showers, but most aerodromes fit all night.
- 1250 hours. Western Germany:- Chance of good breaks, but the prospect of a real clearance is remote and there is a threat of low stratus. Much convection cloud en route.
- Home Bases:- Most bases will be fit but there may be areas of rain although unduly low cloud is not anticipated.
- 1700 hours. Western Germany:- 7-8/10 low cloud probable. Medium cloud above more broken than previously expected.
- Home Bases:- Satisfactory.
- 1830 hours. Western Germany:- 8-10/10 strato-cumulus clearing during the night probably towards dawn. Little chance of a clearance by 0200 hours.

Executive Orders

2. Cloudy conditions were expected over targets and 2 Wellingtons were sent to do blind bombing at Cologne and to do a night reconnaissance if the weather was suitable in order to ascertain the effects of the previous night's raid.

Sorties

3. 2 Wellington III of 3 Group set out to attack Cologne. They both found 10/10 cloud over the target and accordingly bombed on T.R. fixes which coincided with flak concentration. 1 of these aircraft received minor flak damage. No other incident of importance occurred during this attack. The moon was above the horizon and 95% of full.

EC/S.26342/1/ORS.
25th June, 1942.