# Table of Contents

## VOLUME 2

### Appendixes

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>Sealion</em> - Transcribed Photographic Interpretation Reports</td>
<td>291</td>
</tr>
<tr>
<td>2. Strategic Bombing - Transcribed Photographic Interpretation Reports</td>
<td>323</td>
</tr>
<tr>
<td>3. Normandy - Transcribed Photographic Interpretation Reports</td>
<td>361</td>
</tr>
<tr>
<td>4. Master French Railway System Maps</td>
<td>416</td>
</tr>
</tbody>
</table>

### Bibliography

| Bibliography | 423 |

Bibliography
Appendix 1

**Sealion – Transcribed Photographic Interpretation Reports**

This appendix contains transcriptions of six PIU reports and one First Phase Form White used in Chapter 3 which are listed in the table below. The formatting is a close approximation of the original to give the same experience as reading the photographic interpretation reports as sent out by the PIU. However, they were typed on a larger format paper so page breaks that occur out of alignment with the A4 page are shown by a line of full stops running across the page.

<table>
<thead>
<tr>
<th>No</th>
<th>PIU Report No</th>
<th>Locality</th>
<th>Date of Photographs 1940</th>
<th>Date of Report</th>
<th>TNA Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>Amsterdam and coast</td>
<td>17 May</td>
<td>17 May</td>
<td>Air 34/290</td>
</tr>
<tr>
<td>2</td>
<td>54</td>
<td>Italy</td>
<td>8 June</td>
<td>11 June</td>
<td>Air 34/290</td>
</tr>
<tr>
<td>3</td>
<td>Form White to 230</td>
<td>Coast Egeroen to Christiansand</td>
<td>1 August</td>
<td>1 August</td>
<td>Air 34/292</td>
</tr>
<tr>
<td>4</td>
<td>230</td>
<td>Coast Egeroen to Christiansand</td>
<td>1 August</td>
<td>3 August</td>
<td>Air 34/292</td>
</tr>
<tr>
<td>5</td>
<td>377</td>
<td>Bruges - Flushing – Middelburg</td>
<td>1 September</td>
<td>2 September</td>
<td>Air 34/293</td>
</tr>
<tr>
<td>6</td>
<td>470</td>
<td>Amsterdam</td>
<td>18 September</td>
<td>20 September</td>
<td>Air 34/294</td>
</tr>
<tr>
<td>7</td>
<td>593</td>
<td>Antwerp – Ostend - Dieppe - Le Havre</td>
<td>13 October</td>
<td>14 October</td>
<td>Air 34/295</td>
</tr>
</tbody>
</table>
PRELIMINARY INTERPRETATION REPORT.
NO. 10

Photographs taken by - P.D.U,
on - 17.5.40.

Sortie No. - HNA/017

LOCALITY: AMSTERDAM, along the ship canal to
IJMUIDEN, thence southwards along
the coast – SCHOOWEN Airport

AMSTERDAM REGION

Some oil tanks destroyed and blazing at two points. In one case the oil
spreading over the surface of the water to the opposite side of the harbour.
This oil is not burning.

Only Northern edge of SCHIPHOL aerodrome appears. There are 6 large
aircraft visible.

Military landing ground BUIKSLOOT

No activity and no aircraft.
Some activity of small craft in AMSTERDAM harbour.

NORTH SEA CANAL

Nothing to report.

IJMUIDEN

The entrance is blocked by a vessel occupying slightly more than half
the width between the piers. Nevertheless, an opening probably some
200’ wide remains.

THE HAGUE

South of the town the COKENBURG aerodrome is seen. Apparently 6
aircraft dispersed round the aerodrome, of which some are damaged.
Main buildings badly damaged. On beach near aerodrome 4 large planes and stores.

HOOK OF HOLLAND

Fairly extensive damage along the quays. One building burning. Probable landing ground nearby appears to be bombed.

PRELIMINARY INTERPRETATION REPORT (Contd)
No. 10

No appearance of effective boom defence at entrance to harbour. Vessel (?) destroyer aground 1¼ miles north of northern pier.

SCHOUWEN AERODROME

(Known as HAAMSTADE). Landing field appears to be untouched, although some indications of bomb craters nearby. No activity.

GENERAL

No off-shore shipping was noted.
PRELIMINARY INTERPRETATION REPORT
NO. 54
Photographs taken by P.D.U. on 8.6.40.
Interpretation by P.D.U.I on 11.6.40.

SORTIE NO. IXFA/020

Contact Scale: - 1/50,000
Time of photography: - 1430 - 1440

LOCALITY: CAGLIARI NAVAL BASE.

NAVAL

There are present in the harbour at the positions shown in the Plan the following Naval Units:-

2 – T/B’s 265 ft – possibly PARTENOPE.
2 – T/B’s about 245 ft – possibly GENERALI.
2 – large S/M’s trimmed high, 230 ft – possibly GALVANI or ARCHIMEDE.
6 – S/M’s 195 ft – probably PERLA class.

There are 13 merchant vessels at the positions indicated in the Plan, but there is no impression of activity in loading or discharging.

There are no alterations of importance to Chart 1130 except that the MOLA DI LEVANTE only extends to the position indicated in a firm line, the pecked line extension being at present not begun.

11-12

AERODROMES

There are three Aerodromes at CAGLIARI.

ELMAS
This is the largest of the Aerodromes and is a combined Aerodrome and Seaplane Station.
There is a runway of about 800 m connected with a tarmac to 2 large new hangars. There are 3 other large hangars at the Seaplane quay. The seaplanes are mostly at moorings, but there are full facilities for handling them on land. There are 35 aircraft afloat which appear to be CANT 506 or 506b. These are uncamouflaged as are also a further 2 of these on land and probably 4 CANT 509’s commercial. A further 5 land aircraft, probably CAPRANI 135’s are on the aerodrome. The latter appear to be camouflaged.

212 - 213

-2-

AERODROMES (cont)  Photo Nos.

MONSERRATO CAGLIARI

Appears to be extended.
3 large hangars. No aircraft.

8 – 9

CAGLIARI PORT SEAPLANE BASE. (Shown on attached Chart).

Several hangars and 1 small aircraft.

11 - 12

INTERPRETATION SECTION

P.D.U.I.

Distribution

<table>
<thead>
<tr>
<th>Distribution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.I.S.</td>
<td>1</td>
</tr>
<tr>
<td>Bomber Command</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 3 (c)</td>
<td>1</td>
</tr>
<tr>
<td>P.D.U. Heston</td>
<td>3</td>
</tr>
<tr>
<td>P.D.U.I.</td>
<td>1</td>
</tr>
<tr>
<td>File</td>
<td>1</td>
</tr>
<tr>
<td>Admiralty, N. I.D.</td>
<td>1</td>
</tr>
</tbody>
</table>

Interpretation carried out jointly by Commdr. Barcroft, R.N. N.I.D. and Mr Spender, Interpretation Section, P.D.U.I.
Form White and Photographic Interpretation Report No 230 from Sortie N\10

FORM WHITE

PASS TO PRUI WEMBLEY

(A)  TO 18 GROUP (R) BOMBER COMMAND. ADMIRALTY. AM (FOR A. I. 3. (HD) P R U I WEMBLEY  P. I. 7 HESTON.

(B)  WIC/WPR/1/8 REFERRING TO CC/GE/21/7  CC/G3/21/7  C.3

(C)  COAST FROM EGEROEN TO CHRISTIANSAND SOUTH PHOTO REPORT ON SORTIE NO. N/10

(D)  2 DRS AND ONE UNIDENTIFIED VESSEL IN CHRISTIANSAND HARBOUR. OTHER SMALL CRAFT VISIBLE. THE M.V (10,000 TONS REPORTED ON 29/7 IS STILL IN SAME POSITION VESTRE HAR.. ONE THREE MASTED VESSEL IN INLET NEAR SOGNE. THREE MEDIUM SIZED VESSELS PROCEEDING LINE ASTERN AT SPEED IN A WESTERLY DIRECTION ALONG COAST. WHAT APPEARS TO BE EITHER A LARGE NUMBER OF SMALL CRAFT OR FLOATING TIMBER STILL IN SAME FORMATION IN AN INLET WEST OF ANDOY. A NEW CONCENTRATION OF SMALL CRAFT OR FLOATING TIMBER CAN BE SEEN NEAR THE HEAD OF CHRISTIANSAND FJORD BOTH SIDES OF IT. 29 A/C CAN BE COUNTED ON CHRISTIANSAND AERODROME. THE AERODROME MENTIONED AS BEING NEW ON FORM ORANGE WOULD SEEM TO BE THAT OF CHRISTIANSAND. ONE TANKER APPROACHING CHRISTIANSAND HARBOUR. PHOTOS ARE CLEAR AND FREE FROM CLOUDS.

T. O. O.  20.05
INTERNETATION REPORT NO. 230
Photographs taken by P.R.U, on 1.8.40.
Interpretation by P.I.U on 3.8.40.

SORTIE N/10

Contact Scale: 
1/50,000 (F.24)
1/20,000 (F.8)
Mean time of photography: - 11.30 hours
Flying height: - 34,000 ft.

LOCALITY: KRISTIANSAND AND COAST TO JUST SHORT OF EGERUSUND

KRISTIANSAND

SHIPPING

The two torpedo boats previously reported at the town piers have left. One, possibly a smaller one, has arrived at the PIER by the railway wharf.

4 small steamers have arrived in the VESTREHAVEN and are berthed at the piers. Three others are lying off and one tanker (300’) is at a wharf at the N.W. extremity of ODDEROYA.

Otherwise there is no change in the disposition of ships in the neighbourhood.

Report No.202 contains a misprint.

The vessel in the dry dock at BREDALSHOLM should have been described as 230’ and not 20’ long. The vessel is still present.

FLOATING TIMBER OR PONTOON SECTIONS.

The concentrations previously reported are still present undisturbed. The present Sortie also reveals similar floating concentrations on the land locked lake described as VENNESLA FJORD – Lat. 56°15’ N. Long. 7°56’ E. It is still considered that these objects are likely to be incidental to the economic life of the country, rather than specific military material.

AERODROME

39 Aircraft are seen, comprising 26 Heinkel 111’s of which 4 are apparently damaged or undergoing major repair; One Ju.52; 9 aircraft of roughly wing span of a Heinkel 111 in the dispersal area N.W. of the aerodrome; 3 small fighters. Constructional work on
the runways and hangars has progressed comparatively slowly.

OIL STORAGE

There appears to be oil storage near the Naval base (2 tanks), W. of the VESTREHAVEN (2 tanks) and at KROODDEN, INDRE FLEKKEROY (2 tanks).

VESTRE GABET

3 trawlers or minesweepers in line ahead are seen leaving KRISTIANSAND through the Channel.

REPORT NO. 230 (CONT)

MANDEL

No.

SHIPPING

There is some movement of small craft, but otherwise no shipping.

AERODROME

An Aerodrome not previously reported is under construction W. of the town at Lat.52°02’ N. Long.07°27’ E. The area cleared so far is only 825 x 225 yds. with a runway extending along the E.W. (long) axis. No hangars, no aircraft.

COAST BETWEEN MANDAL AND EGERSUND

No shore activity to report and no movements of shipping except unimportant movements of small craft.

DISTRIBUTION

C.A.S. 1
Coastal Command
  Section Y 2
  Plans S/L 1
Maxwell
Bomber Command 1
Admiralty 1
A.I. 3 (b) (H.D) AM 1
M.I. 14 (c) 1
A.I. 1 (c) 1
A.I. 3 (a) 1
G.S.I. G.H.Q. 1
P.R.U. 1

G.B. Park
INTERPRETATION OFFICER
P.I.U. WEMBLEY
<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.I.U</td>
<td>3</td>
</tr>
<tr>
<td>D.P.R. A.M.</td>
<td>1</td>
</tr>
<tr>
<td>F.O. 2 (b)</td>
<td>2</td>
</tr>
<tr>
<td>Wick</td>
<td>2</td>
</tr>
<tr>
<td>A.I. 3 (b)</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 1 (b)</td>
<td>1</td>
</tr>
</tbody>
</table>
INTERPRETATION REPORT NO. 377
Photographs taken by P.R.U, on 1.9.40.
Interpretation by P.I.U on 2.9.40.

SORTIE H/148

Contact Scale: - 1/51,000 (8” Camera)
1/26,000 (14” Camera)
Mean time of photography: - 1120 hours
Flying height: - 31,000 ft.

SCHELDT – FLUSHING – MIDDELBURG.

BRUGES  Photo Nos.

SHIPPING  4

Only one barge is present in the 2 miles of the BRUGES CANAL
covered by this Sortie. There has been a slight redistribution of the
few barges present in the waterways around the Town. There are
no barges present in the 6 miles of the BRUGES – OSTEND
CANAL covered by this Sortie.

LANDING GROUND: ST. CROIX  409

No aircraft visible
Slight wood clearance has taken place on the E. side of the landing
area, otherwise there has been no change since 18/8/40 (H/113)

M.T.  406

There is a considerable increase in the concentration of M.T.
vehicles at BRUGES Engineering Works since 18/8/40 (H/113)

INDUSTRY  406

The BRUGES Engineering Works mentioned above show no signs
of activity.

OIL STORAGE  5

The small group of oil tanks on the N. side of the Town show no
signs of damage.
RAILWAYS

Some movement of rolling stock has taken place in the sidings S. of the Town, but there is little change in the quantity present since 18/8/40 (H/113)

AMMUNITION DUMP

The extensive ammunition dump 6½ miles S.W. of BRUGES shows no signs of activity, and no change is observed since 20/7/40, (H/22)

REPORT NO. 377 (CONT D)

GHENT

SHIPPING

The 14 miles of the GHENT – TER NEUZEN CANAL from GHENT to STROODORP are covered by this Sortie. There has been an increase of about 200 barges in this part of the CANAL since 15/8/40 (H/103); some 50 of these can be seen moving, all in a SOUTHERLY direction. Notable increases are as follows:

70 in the NEW DOCK at VELDSTRAAT 423-425
35 in the AVANT PORT 429-439
15 in the NOUVEAU BASSIN 421

ST. DENIS WESTERN AERODROME

3 aircraft are visible, two with a wing span of 36 ft. and one of 56 ft. The landing area has been made serviceable, and considerable constructional activity has taken place around the perimeter of the aerodrome since 4/7/40 (H/1)

LANDING GROUND: MOERBEKE

No aircraft are visible. Signs of activity are noted in the woods on the S.W. side of the aerodrome since 24/6/40 (HNA/042)

OIL STORAGE

There has been no change in the state of the oil storage tanks along the GHENT – TER NEUZEN CANAL between GHENT and SELZAETE.
One mile E. of ST. DENIS WESTREM Aerodrome there is a large M.T. depot.
There are approximately 3000 vehicles present and of these approximately 1000 appear to be new arrivals since 18/6/40 (H/23)
There is a line of six ammunition storage buildings along the S.E. side of this depot and a group of barrack buildings on the W. side.
There is a considerable increase and considerable change in the disposition to the large concentration of M.T. vehicles in the S. part of the Town, ¾ mile E. of the barracks.

Considerable movement of the rolling stock has taken place in the large marshalling yards near the BASSIN DE COMMERCE and the sidings N. of ST DENIS WESTREM Aerodrome since 18/6/40 (H/23) but there is no great change in the quantity present.

Only the SOUTHERN 4 miles of this canal are covered, 71 barges are shown of which 48 are moored, 23 are proceeding S. and none are moving N.

60 barges are moored in the Harbour. One self propelled barge and 4 barges being towed are outside the Harbour. Lying at anchor off the Harbour is a vessel of 200 ft. probably a Torpedo Boat. A second vessel of 170 ft. manoeuvring around it is probably a patrol craft. A vessel of 85 ft. is proceeding E. off WALSOORDEN.

The average length of the barges noted in the SOUTH BEVELAND CANAL and in and off HANSWEERT Harbour is 170 ft. to 200 ft. Until 26/7/40 and including Sortie H/37 of 26/7/40 (Report No. 192) there
were consistently few barges and little traffic in the S. BEVELAND CANAL and few barges in HANSWEERT Harbour, (Sortie H/37 revealed 4 or 5 barges in HANSWEERT Harbour) Sortie H/134 of 28/8/40 covered the NORTHERN 2½ miles of the CANAL and revealed one large and 12 medium barges (Report No. 358). Although no Sorties intermediate between H/37 of 26/7/40 and the present Sortie are available for the S. part of the CANAL, and for HANSWEERT, the concentration of over 160 barges revealed here in the present Sortie merits the description of abnormal.

MOUTH OF THE SCHELDT

SHIPPING
One vessel of approximately 450ft on her side 200 yards S.E. of DOEL. 53
4 barges of approximately 380 ft. W. of STOOFGART being towed S. 252
One barge of 250 ft. at the W. end of the DERIVATION DU SCHYN. 55
Eight motor boats W. of OUD KRISSCHANS, 4 moving N. and 4 S. 55, 252
On the SCHELDT E. of BANENDORP are 4 barges, 3 proceeding N. one S. 56
4 barges moored in the SCHELDT E. of HOOFDPLAAT and some small barges in HOOFDPLAAT Harbour but this is not fully covered. 63
3 small barges have arrived at BRESKENS since 31/8/40 (H/143) 66

RAILWAYS

There are approximately 1000 trucks arranged in fifty rows in the marshalling yards at GARE DE TRIAGE ET DE FORMATION D’ANVERS NORD, observed for the first time. No apparent activity.

FLUSHING

SHIPPING
One small vessel of 90 ft. has left the Outer Harbour and one of 160 ft. is seen proceeding out of the Harbour. Two barges have arrived, otherwise there is no change since H/143 (31/8/40)
AERODROME

No change since 31/8/40. (H/143)
No aircraft visible.

CANAL FROM FLUSHING TO MIDDELBURG

One barge proceeding S.

MIDDELBURG

Nothing to report

MINESWEEPING

Photographs were taken of minesweeping operations at the following positions:

Lat. 51° 24’ N. Long. 02° 59’ E.
10 miles OSTEND NORTH LIGHT 15° True.
Lat. 51° 27’ N. Long. 03° 05’ E.
14 miles OSTEND NORTH LIGHT 25° True.

(These positions are approximate having been determined from the Pilots plot and report)
Each sweep consists of 4 craft in diamond formation.

Glyn E Daniel
INTERPRETATION OFFICER
P.I.U. WEMBLEY

DISTRIBUTION

C.A.S. 1
Coastal Command
Section Y 2
Plans 1
Bomber Command 1
Admiralty 2
A.I. 3 (b) (H.D) 1
M.I. 14 (c) 1
A.I. 1 (c) 1
A.I. 3 (a) 1
G.S.I. G.H.Q. 1
D.P.R. 1
P.R.U 1
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.O. 2 (b)</td>
<td>2</td>
</tr>
<tr>
<td>M.I. 6</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 1 (b)</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 3 (b)</td>
<td>2</td>
</tr>
<tr>
<td>W/C Tennant, A.M.</td>
<td>1</td>
</tr>
<tr>
<td>No. 16 Group, R.A.F.</td>
<td>1</td>
</tr>
<tr>
<td>P.I.U.</td>
<td>3</td>
</tr>
</tbody>
</table>
SUPPLEMENTARY INTERPRETATION REPORT NO. 470

Photographs taken by P.R.U, on 18.9.40.
Interpretation by P.I.U on 20.9.40.

SORTIE No. H/218

Contact Scale: - 1/45,000 (8" F.L.)
1/25,000 (14" F.L.)
Mean time of photography: - 1100 hours
Flying height: - 29,500 ft.

LOCALITY: AMSTERDAM

Note: Only the Western half of Port is covered by the large scale photographs, and heavy cloud and cloud shadow hinder the interpretation on the small scale photographs. Barges above 200' in length are referred to as large barges. Most of these appear to be of the self-propelled RHINE cargo vessel type.

AMSTERDAM

SHIPPING

In all there are about 300 barges and 15 merchant ships of varying sizes present and, as far as cloud permits comparison, change seems but slight since 6.9.40 (H/164). The distribution is as follows:-

MAIN WATERWAY

There are about 12 large barges waiting to pass through the locks into the DUITEN IJ and also a ship (about 180’). There are numerous small craft moving about the Harbour and some strings of lighters are being towed, but for a port of this size the activity appears normal.

DOCKS ON THE S. OF THE MAIN WATERWAY
SUMATRA AND SURINAME QUAYS

One cargo ship (300’).  
7 barges and small shipping.

ANCHORAGE OFF SUMATRA AND SURINAME QUAYS

About 45 barges, mostly large.

ERTS HARBOUR

Partially obscured by cloud.  
3 barges visible and also some small craft.

SPOORVEG HARBOUR

Almost entirely covered by cloud, but 12 barges can be seen.

JAVA QUAY

About 10 barges and small vessels.

-2-

INTERPRETATION REPORT NO. 470 (cont) (SUPPLEMENTARY)

AMSTERDAM (cont)

SHIPPING (cont)

DOCKS ON THE S. OF THE MAIN WATERWAY (cont)

COMMERCIAL QUAY

6 barges

BINNEN DOCK

2 large barges.

NAVAL DOCKYARD

Apart from the 2 hulks normally present, 3 small craft are present.
EASTERN DOCKS, DIJKS GRACHT, NEW CUT & ASSOCIATED BASINS

6 barges and numerous small craft, but the scale makes it impossible to count their number.

DE RUYTER AND ADJACENT QUAYS

One large barge.
18 barges and small shipping.
Numerous small craft.

WESTERN DOCK

One large barge.
7 other barges.

TIMBER POND

Activity is greatest in the EASTERN BASIN as usual, and the majority of barges are in this Basin and also 6 floating cranes. The shipping comprises:-
- 2 cargo ships (370’ and 280’)
- 12 large barges.
- 29 other barges.

COEN HARBOUR

Apart from the Coastal Defence ship, possibly identifiable as the “NIELS TUEL”, there are:-
- 6 large barges
- 2 cargo ships (300’)
- One coaster (120’)
- About 20 smaller ships including a few barges.

PETROLEUM HAFEN

7 or 8 barges.
There is no great impression of activity in the Basin, many of the tanks having been destroyed.

DOCKS ON THE N. OF THE MAIN WATERWAY

JOH V. HASSELT CANAL (EAST HALF)

About 10 large barges and some small shipping.
ADJACENT CANALS
4 or 5 lighters and a few small craft.
One floating crane.

AMSTERDAM DRY DOCK CO.
There appears to be 9 small ships in the Dry Docks and Basin, but heavy cloud shadow prevents full interpretation.
2 of the vessels, visible on the large scale photographs are about 180’ in length and are warships of obsolete type; one of these is in the Dry Dock.

ENTRANCE TO GREAT NORTH HOLLAND CANAL
16 barges.
There are numerous small craft in the Haven at the entrance to the Canal, but these are probably yachts.

CANALS BETWEEN GT NORTH HOLLAND CANAL & JOH V. HASSELT CANAL (WEST HALF).
One large barge.
About 30 other barges and small shipping.

HASSELT CANAL (WEST HALF)
One large barge.
23 barges and small shipping.

ZIJ CANAL AND DOCK AT POWER STATION
One large barge.
38 other barges and small shipping.

NETHERLANDS SHIPBUILDING CO.
There are 4 hulls and work on them is being carried out. One vessel (530’) is launched and appears to be a fast cargo ship. On the slips are 3 similar vessels (550’ in length) and a hull (500’), most probably a warship. There are 9 barges and small craft present at the Wharves and some 20 small craft in the Canal on the N. side of the Works, but it is impossible to count the number with any certainty. There are 4 floating cranes, 3 of which are at work on the hull which has been launched. The excavation work is proceeding on the construction of the new Dry Dock here.

NETHERLANDS DRY DOCK CO.
At the building yards there are 2 large hulls, one (530’) is launched and is being worked on. It appears a typical fast cargo ship. The second is still on the slips and appears to be a sistership.

------------------------------------------------------------------------------------------------------------------------

INTERPRETATION REPORT NO. 470 (cont) (SUPPLEMENTARY)

AMSTERDAM (cont)  Photo Nos.

SHIPPING (cont)

DOCKS ON THE N. OF THE MAIN WATERWAY (cont)

NETHERLANDS SHIPBUILDING CO. (CONT)

4 barges and about 6 small craft are at the Wharves; there is also some floating timber in the Canal on the N. side of the Works.

DOCKS AND CANALS IN THE CITY

DOCKS NEAR DUMPING STATION (CANAL WORKS)

16 barges.

DINNEN AND BUITEN AMSTEL

5 barges and some small craft.
DISTRIBUTION

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.A.S.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Coastal Command</strong></td>
<td></td>
</tr>
<tr>
<td>Section Y</td>
<td>2</td>
</tr>
<tr>
<td>Plans</td>
<td>1</td>
</tr>
<tr>
<td>Bomber Command</td>
<td>1</td>
</tr>
<tr>
<td>Admiralty</td>
<td>2</td>
</tr>
<tr>
<td>A.I. 3 (b) (H.D)</td>
<td>1</td>
</tr>
<tr>
<td>M.I. 14 (c)</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 1 (c)</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 3 (a)</td>
<td>1</td>
</tr>
<tr>
<td>G.S.T. G.H.Q.</td>
<td>1</td>
</tr>
<tr>
<td>D.P.R.</td>
<td>1</td>
</tr>
<tr>
<td>P.R.U</td>
<td>1</td>
</tr>
<tr>
<td>P.I.U</td>
<td>3</td>
</tr>
<tr>
<td>F.O. 2 (b)</td>
<td>2</td>
</tr>
<tr>
<td>M.I. 6</td>
<td>1</td>
</tr>
<tr>
<td>Group 16, Chatham</td>
<td>1</td>
</tr>
<tr>
<td>C. in C. The Nore</td>
<td>1</td>
</tr>
<tr>
<td>C. in C. Harwich</td>
<td>1</td>
</tr>
</tbody>
</table>
INTERPRETATION REPORT NO. 593

Photographs taken by P.R.U, on 13.10.40.
Interpretation by P.I.U on 14.10.40.

SORTIE H/325

Contact Scale: 1/26,000 (14" F.L.)
               1/48,000 (8" F.L.)
Mean time of photography: - 0920 hours
Flying height: - 31,000 ft.

LOCALITY: ANTWERP – FLUSHING – TERNHEUZEN –
           ZEEBRUGGE – OSTEND – BOLOGNE – DIEPPE – FECAMP –
           LE HAVRE

ANTWERP

SHIPPING

The total number of ships (40 in the docks and 17 at the river wharves) and barges present in the Port shows no appreciable change since 2.10.40. (H/277). Movement of barges can however be seen and re-arrangement has taken place.
Two ships (215’) have arrived near the Dry Dock in the Canal Dock and these may possibly be naval craft.
About 4 merchant ships have left the Port since 2.10.40 and there have been some changes of dispositions in the Port itself.
The shipping is dispersed as follows:-
  BASSIN BONAPARTE. About six barges present, but heavy shadow prevents precise interpretation.
  BASSIN GUILLAUME. About 25 vessels present most of which appear to be barges.
  BASSIN DU KATTENDIJK. One merchantman 215’, about 10 barges and numerous small shipping. Little change since 2.10.40.
  BASSIN SAS. 15 to 20 barges are crowded in this small basin which is an increase since 2.10.40, the basin now being completely full.
  BASSIN AUX BOIS. One merchantman 250’ and 45 barges. This is a slight decrease in the number of barges since 2.10.40 and at the same time some 25 barges which
were moored end on to the quay have now either left or are moored alongside in the normal manner. There is some movement of barges from this basin to the Bassin Asia.

BASSIN ASIA. 17 barges are present and in addition there has been a notable increase of 24 craft which are moored in tiers of three along the eastern wall of the basin but the quality of the photographs does not permit these to be identified. It is suspected however that they are barges.

-2-

INTERPETATION REPORT NO. 593 (cont)

ANTWERP (cont)  

SHIPPING

BASSIN CAMPINE. About 15 barges and some small craft are present. No change since 2.10.40. (H/277).

BASIN NORTH OF BASSIN ASIA. 56 barges present. No change since 2.10.40. (H/277).

LEFEBVRE DOCK. 2 merchantmen 425 ft. No change since 2.10.40. (H/277).

AMERICA DOCK. About 15 barges and 5 floating cranes, representing a slight increase since 2.10.40.

1ST WET DOCK. 61 barges present. Little change except in the local disposition since 2.10.40.

SHELTER DOCK. 35 barges moored in tiers of two and three as previously.

2ND WET DOCK. 3 barges near the mouth of this dock moored end on to the quay remain in the same position and appear to have ramps leading on to the quay. Remaining 41 barges are moored mostly in tiers and show no change since 2.10.40.

3RD WET DOCK. The 2 merchantmen in this dock have departed but they are probably the same two vessels which appear to have arrived in the adjacent Canal Dock. The total number of barges appears to be about the same as on 2.10.40. but these are now moored in pairs all around the dock wharves; formerly they were moored in tiers of 4 to 8.

INNER CANAL DOCK. Five merchantmen (one 450’, four 300 – 400’) are dispersed at the wharves while one which was manoeuvring in the basin on 2.10.40. has left. Two of the new arrivals in this dock are probably the vessels which have left the wet dock No.3. 36 barges are present, 20 of which have been moored end on to the quay in a group at the entrance to the basin and all appear to be new arrivals and have ramps leading on to the quay. There appear to be 20 floating cranes moored in a group near the SHELTER DOCK.

OUTER CANAL DOCK. 50 ships are present two of which as
already noted may be naval craft. The rest are mostly moored in the same positions as on 2.10.40. (H/277). Two of them have apparently departed but they may merely have changed their berth as there are also two apparent arrivals. A small merchantman has arrived in one of the dry docks while a similar vessel in the adjoining dry dock has left.

KRIUSSEHANS LOCK. One large merchantman 550’ is being manoeuvred into the lock.

RIVER SCHELDT. At the wharves the merchant shipping (17 ships) appears to be little changed since 2.10.40. (H/277) although two medium merchantmen may have departed. The poor definition of the small scale contacts make a definite statement impossible. There are about 20 barges moored at various jetties and wharves on both sides of the river at the North end of the River docks.

CANAL DE LA CAMPAGNE. The section of the canal as far as the locks near Merkem is seen on the large scale photographs; some 10 barges are seen in the section of the canal between the locks and ANTWERP docks of which the majority appear to be stationary. 13 barges are present in the BASSIN DE BATELAYE which opens off this Canal. The small scale photographs cover a short section of the Canal EAST of Merxen lock but there does not appear to be any traffic in the section.

DOEL. About six large barges are present at this little port some 7½ miles N.E. of ANTWERP. A merchantman (350’) lies in the river off the harbour and may have been damaged by bombing. It appears to have lighters alongside.

SHIPPING IN THE SCHELDT ESTUARY. At the entrance to the Estuary of the SCHELDT near the DUTCH-BELGIAN Frontier, two barges (250’) lashed together are proceeding downstream escorted by two motor boats. Two other motor boats are heading for ANTWERP.

AERODROME: ANTWERP-DEURNE

Eleven aircraft are present probably being:
1 Ju 52
2 span 65’
3 span 50’
5 fighters span 34’

No fresh constructional activity is noted

RAILWAYS
NORTHFORMATION STATION. There is a slight decrease in the total amount present.

GARE DES MILLES WAGONS. The rolling stock shows some increase since 2.10.40 (H/277) and also appears to have been completely redistributed.

FLUSHING

SHIPPING

15 patrol vessels and 12 barges have left the Outer Harbour and there has been a re-distribution of barges and smaller craft in the remainder of the Port since 7.10.40 (H/296). The total number of barges, including the one in the MIDDELBURG canal, is about 110. Five small vessels are anchored in FLUSHING ROAD as follows:

- Three of 200’, one of 150’ and one of 90’.

A detailed summary of the shipping now present in the Port can be given as follows:

Outer Harbour.

- One tanker of 300’, 28 barges and 3 patrol vessels.

Verbreeze Canal.

- 15 barges.

Inner Harbour East.

- Apparently no shipping present.

Flushing (cont)

Photo Nos

INTERPETATION REPORT NO. 593 (cont)

FLUSHING (cont)

Inner Harbour West.

- One vessel of 120’, and about 5 small craft.

Marine Dock.

- One train ferry, 170’, two small merchantmen 150’ and about 7 small craft.

AERODROME, VLISSINGEN

- 8 aircraft are visible as follows:-
  - 1 of wing span 60’
  - 7 of wing span about 35’.

RAILWAYS

- Two trains can be seen moving near the Station. There is very little rolling stock present.
MIDDELBURG CANAL

SHIPPING

The Canal from FLUSHING to MIDDELBURG is covered by this Sortie. At least 40 barges have left the FLUSHING end of the Canal since 7.10.40 (H/296). It is noted that 115 barges were present in this part of the Canal on 5.10.40 (H/287), but the quality of the present photographs does not allow a definite count to be made.

THE SLOE

Not covered on these photographs.

SHIPPING IN THE MOUTH OF THE WEST SCHELDT IN THE HONTE

Proceeding along the BELGIAN coast in a Westerly direction there is a procession extending over 3 miles consisting of 15 tows of 1 towing vessel and three or four small vessels or barges (about 80' in length) lashed alongside each other. The Convoy is headed by a small merchant vessel ahead of which are 8 motor boats, one leading, six in line abreast and one astern.

BRESKENS

Six small vessels are leaving the Harbour in line astern. The shipping in the Harbour is not clearly seen but there appears to be little change since 1.10.40 (H/273), when there was one small steamer, six barges and 20 small fishing craft present.

TERNEUZEN

SHIPPING

4 barges are seen in the Outer Harbour and 12 in the waterways around the town. Other than 1 small motor boat proceeding N. there is no shipping present in the four miles of the GHENT-TERNEUZEN CANAL covered by this Sortie.

KNOCKE
SHIPPING

No shipping is visible in the portion covered of the CANAL de DERIVATION DE PASSAGEULE.

AERODROME: KNOCKE LE ZOUTE

No aircraft visible. No constructional activity.

HEYST

SHIPPING

2½ miles off HEYST are 8 trawlers of uniform type 185’ long proceeding S.W. and followed by a merchant vessel of about 425’.

ZEEBRUGGE

SHIPPING

There is no change in the shipping in the Outer Harbour since 7.10.40 (H/296). The 7 vessels, the 11 small unidentifiable vessels 120’ in length and the small vessel of 100’ (with a smaller vessel alongside it) are all still alongside the Mole. There is very little change in the shipping in the Inner Harbour. 3 vessels of 70 to 90’ are in the CHENAL D’ACCES and one of these is proceeding South at the time of the photography. A vessel of 150’ has arrived at the S. end of the CHENAL D’ACCES and has passed beyond the block ships and is in the Mouth of the LOCK leading to the BRUGES-ZEEBRUGGE SHIP CANAL.

No shipping is visible in the portion of the BRUGES-ZEEBRUGGE SHIP CANAL covered nor in the portions of the parallel CANAL LEOPOLD and the CANAL de DERIVATION de la LYS.

INDUSTRY

Activity is visible in the industrial plant S. of DARSE No.1. and W. of the Ship Canal. A column of steam is seen issuing from the quenching tower of the coke factory.

-6-

INTERPRETATION REPORT NO. 593 (CONT)

BLANKENBERGHE

SHIPPING

No shipping visible. Nothing to report
OSTEND

SHIPPING

The 7 merchantmen (150’ – 300’) remain at their berths in the AVANT PORT.
The vessels suggested as possible T.B’s are still present in the harbour but these photographs tend to increase the element of doubt in their identification.
There has been an increase of 25 small craft (75’ and 125’) and 15 barges since 10.10.40 (H/318). There are now approximately 45 small craft the majority of which are berthed in the AVANT PORT, and 55 barges distributed in the harbour. It is noted that many of the smaller craft are in steam.
At the Southern end of the new Wet Dock where activity in barge loading has been previously noted three barges are present and they appear to have gangway connections to the Dock side. 2 barges were seen here on 10.10.40.
There is movement in this harbour. Two units each consisting of a tug towing two barges are entering. Two small craft with peculiar wakes are leaving Port; it is suggested that they may be sweeping the entrance channel.

RAILWAYS

A number of engines are in steam in the vicinity of the running sheds

OSTEND/BRUGES CANAL

10 stationary barges are present in the one mile of Canal immediately S. of OSTEND.

INDUSTRY

The coking and associated recovery Plant on the OSTEND/BRUGES CANAL one mile S.E. of OSTEND is seen to be active. This plant has been previously described as a possible oil refinery.

AERODROME: OSTEND-STEEENE

No aircraft can be distinguished.

AERODROME: OSTEND-MIDDELMERKE

No aircraft. No activity

-7-
BOULOGNE

SHIPPING

21 trawler type vessels have arrived in the Outer Harbour since 12.10.40 (H/324). Otherwise there appears to be no change in the shipping present in the Port since 7.10.40 (H/297) when there were 180 barges, 23 towing vessels, and about 60 small craft. Several of the barges in the Wet Dock are still equipped with gangways on the quay side but the scale of the photographs is too small to state a definite number.

AERODROME: BOULOGNE TEGATTE

One medium aircraft present outside the hangar

DIEPPE

SHIPPING

Change. Four or five small coasters have arrived and a number of small craft have left since 10.10.40 (H/318).

Present position:

Outer Harbour.

4 or 5 more coasters have arrived.

Darse De Peche & Bassin De Mi-Maree.

No change.

Bassin Duquesne.

A small trawler has left and has probably moved to the inner harbour.

Inner Harbour.

In addition to the small trawler previously reported another similar steamer has arrived. This is probably the vessel which was previously in the BASSIN DUQUESNE.

New Dry Dock.

A number of small craft reported to have arrived on 10.10.40. have now left, but the quality of the photographs precludes a definite count. The barges have been re-distributed but the number appears the same.

RAILWAYS

There has been a slight increase in rolling stock.
AERODROME: DIEPPE/ST AUBIN & SATELLITE LANDING GROUND

No aircraft visible. No activity.

INTERPRETATION REPORT NO. 593 (CONT)

DIEPPE (CONTD)

LANDING GROUND: DIEPPE/DERCHIGNY

No aircraft. No activity.

LANDING GROUND: DIEPPE/BRACY (BACQUEVILLE)

Not covered

LANDING GROUND: DIEPPE/QUIBERVILLE

Not covered

FECAMP

SHIPPING

12 barges have left the harbour since 7.10.40 (H/294). The shipping is now:

AVANT PORT.

No shipping.

BASSIN BERIGNY.

Four barges and some small craft. Two motor boats are moving W. at speed outside the Harbour.

LE HAVRE

SHIPPING

Little change has taken place in the shipping since 12.10.40 (H/324). A full statement of the shipping was given in Report 552 of 5.10.40 (H/288) and only change will be reported here.

BASSIN DE LA CITADELLE.

6 small vessels have re-appeared at their former berth at the
QUAI DE L’YSER where the M.T.B’s were reported on 10.10.40 (H/310).

BASSIN DE LA BARRE.

6 small vessels have arrived at the QUAI CASIMIR-DELAVIGNE where possible M.T.B.’s were reported on 10.10.40 (H/310).

BASSIN DU COMMERCE.

The number of small craft in the W. Bassin has been approximately doubled since H/324.

INNER PORT.

The 7 craft (reported as 4 in H/324 on 12.10.40) which are possibly small towing vessels have left the QUAI DES REMORQUEURS.

-9-

INTERPRETATION REPORT NO. 593  (CONT)

LE HAVRE CONT.

GARAGE DE GRAVILLE.

Three barges are moving out towards the BASSIN VETILLART.

LE HAVRE ROADS

No aircraft visible.

LANDING GROUND: LE HAVRE/DIEVILLE.

No aircraft visible.

AERODROME: LE HAVRE/OCTEVILLE.

No aircraft visible.

HONFLEUR

This Port was last covered by vertical photographs on 27.9.40 (H/262). The present photographs are partly obscured by cloud, but it appears that two at least of the small craft have left.

Glyn E Daniel
DISTRIBUTION

<table>
<thead>
<tr>
<th>Department</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.A.S.</td>
<td>1</td>
</tr>
<tr>
<td>Coastal Command</td>
<td></td>
</tr>
<tr>
<td>Section Y</td>
<td>2</td>
</tr>
<tr>
<td>Plans</td>
<td>1</td>
</tr>
<tr>
<td>Bomber Command</td>
<td>1</td>
</tr>
<tr>
<td>Admiralty</td>
<td>2</td>
</tr>
<tr>
<td>A.I. 3 (b) (H.D)</td>
<td>1</td>
</tr>
<tr>
<td>M.I. 14 (c)</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 1 (c)</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 3 (a)</td>
<td>1</td>
</tr>
<tr>
<td>G.S.I. G.H.Q.</td>
<td>1</td>
</tr>
<tr>
<td>D.P.R.</td>
<td>1</td>
</tr>
<tr>
<td>P.R.U</td>
<td>1</td>
</tr>
<tr>
<td>F.O. 2 (b)</td>
<td>2</td>
</tr>
<tr>
<td>M.I. 6</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 3 (b)</td>
<td>1</td>
</tr>
<tr>
<td>A.I. 9</td>
<td>1</td>
</tr>
<tr>
<td>16 Group</td>
<td>1</td>
</tr>
<tr>
<td>O.C. &quot;B&quot; Flight</td>
<td>1</td>
</tr>
<tr>
<td>C.I.C. The Nore</td>
<td>1</td>
</tr>
<tr>
<td>P.I.U.</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix 2

**Strategic Bombing – Transcribed Photographic Interpretation Reports**

This appendix contains transcriptions of six Medmenham reports on Cologne, four Medmenham reports used in the Ruhr dams part of Chapter 4 and the memo to the Senior Air Staff Officer 5 Group that includes the defences extract of the Op *Chastise* missing report D.240.A. The reports transcribed are listed in the table below. They are formatted as close as possible to the original photographic interpretation reports. However, they were typed on a larger format paper so page breaks that occur out of alignment with the A4 page are shown by a line of full stops running across the page.

<table>
<thead>
<tr>
<th>No</th>
<th>CIU Report No</th>
<th>Locality</th>
<th>Date of Photographs/Sortie</th>
<th>Date of Report</th>
<th>Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interpretation Report 3190</td>
<td>Duiseberg, Essen, Cologne, Bergheim</td>
<td>23.3.42 A/433</td>
<td>24.3.42</td>
<td>Air 34/318</td>
</tr>
<tr>
<td>2</td>
<td>Night Photography Plotting Report N.31</td>
<td>Cologne, Le Havre</td>
<td>22.4.42</td>
<td>24.4.42</td>
<td>Air 24/242</td>
</tr>
<tr>
<td>3</td>
<td>Immediate Interpretation Report K.1319</td>
<td>Cologne</td>
<td>25/29.4.42 A/647 &amp; A/675</td>
<td>3.5.42</td>
<td>Air 24/242</td>
</tr>
<tr>
<td>6</td>
<td>Interpretation Report N.26 &amp; Map</td>
<td>Cologne</td>
<td>30/31.4.42</td>
<td>10.8.42</td>
<td>MA Acq No 11486</td>
</tr>
<tr>
<td>7</td>
<td>No Reference but titled: ‘Special Interpretation Report on Defences’</td>
<td>Moehne</td>
<td>19.2.43</td>
<td>21.2.43</td>
<td>Air 14/4797</td>
</tr>
<tr>
<td>8</td>
<td>D.240.A quoted in Bomber Command Memorandum</td>
<td>Moehne Dam</td>
<td>4.4.43</td>
<td>27.2.43</td>
<td>Partial extract of report in AIR 14/2036, but accompanying plan missing</td>
</tr>
<tr>
<td>9</td>
<td>D.264.A</td>
<td>Moehne Valley Barrage</td>
<td>4.4.43</td>
<td>5.4.43</td>
<td>Air 20/4797</td>
</tr>
<tr>
<td>10</td>
<td>Immediate Report No: K.1559</td>
<td>Moehne, Sorpe, Eder Dams</td>
<td>17.5.43</td>
<td>18</td>
<td>Air 34/609 &amp; Air 19/383</td>
</tr>
</tbody>
</table>

---

646 MA Loc C1.3, The RAF Medmenham F540 entry for 17 May 1943 records that report 7 was prepared by Capt Espenhahn of CIU and issued on 21 February 1943. The report was not prepared specially for Op *Chastise*, but for Combined Operations and Op Cornet – see TNA DEFE 2/164 for more details on Op Cornet. The fact the 21 February 1943 report was produced by the Army section of CIU by Capt Espenhahn makes sense when it was for Combined Operations. All pre attack Op *Chastise* CIU reports were produced by the Industries Section D Section by Fg Off d’Arcy. Report 10, Medmenham Immediate Report No: K.1559 has the last page missing in AIR 34/609 the Target Folder for the Mohne and Eder dams but the complete report is in AIR 19/383, Attacks on the Ruhr dams and defence of UK dams and reservoirs.

323
INTERPRETATION REPORT NO. 3190.

Photographs taken on 23.3.42

Sortie A/433

Contact Scale: 1/11,600
Flying Height: 27,000 ft.
Mean time of photography: 11.00 hours

LOCALITY: DUISBERG – ESSEN – COLOGNE - BERGHEIM

1. DUISBERG (G.S.G.S. 4081 Sheet 82 B).

    DUISBERG/NEUENKAMP AERODROME

    The whole of the aerodrome is covered. No aircraft are visible. (Photo Nos. 5-6, 5-40).

2. ESSEN (G.S.G.S. 4081 Sheet 82 B).

    The town is covered, the KRUPP Works being well seen.

3. COLOGNE (G.S.G.S. 4081 Sheet 94 B).

    The town is well covered.

4. BERGHEIM (G.S.G.S. 4081 Sheet 94 B).

    (i) The electric power station at FORTUNA is well seen and is apparently very active.

    (ii) The MARTINSWERK is well seen. (Photo Nos. 5-173, 5-175).

R.A.F. Station, Medmenham.

“A”

LRW/MBB/A.

DISTRIBUTION.

Standard

A.I.2 (b) 2.

M.E.W. (S.C.D.) (Mr Lawrence) 1.

Standard Plot Distribution A.
NIGHT PHOTOGRAPH PLOTTING REPORT. N.31

Photographs taken on night 22/23 April (Targets COLOGNE & LE HAVRE)

COLOGNE: In spite of the cloud and haze reported, only one plottable photograph out of 9 submitted remains un plotted. Out of 8 photographs claiming COLOGNE 6 are “within 5 miles” while the Independent photograph 7½ N.W. of the target is a second print taken 2 minutes after Print 1 which was completely obscured by cloud: the speed and direction of the aircraft would indicate Print 1 was within about 1½ miles of the A.P.

LE HAVRE: Eight out of 11 photographs submitted have been plotted, all of them of the Dock area. Of the 3 unplotted photographs one is very probably of the target.*

<table>
<thead>
<tr>
<th>Group</th>
<th>Sqdn.</th>
<th>A/C Letter</th>
<th>Camera Letter</th>
<th>Print No.</th>
<th>Time Taken</th>
<th>A or B</th>
<th>Reported Position</th>
<th>Plotted Position</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>115(TR)</td>
<td>V</td>
<td>Z2</td>
<td>00.35</td>
<td>A</td>
<td>COLOGNE</td>
<td>RODENKIRCHEN</td>
<td>3½ miles 150° COLOGNE “A”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BOCKLEMUND</td>
<td>4 miles 300° “ ”</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>00.38</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>01.12</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>K</td>
<td>Z9</td>
<td>1</td>
<td>00.38</td>
<td>B</td>
<td>COLOGNE</td>
<td>PULHEIM</td>
<td>7½ miles 300° COLOGNE “A”</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>X</td>
<td>X5</td>
<td>1</td>
<td>00.34</td>
<td>A</td>
<td></td>
<td>MENGENICH</td>
<td>5 miles 310° “ ”</td>
</tr>
<tr>
<td>4</td>
<td>149(TR)</td>
<td>N</td>
<td>Z2</td>
<td>1</td>
<td>00.38</td>
<td>A</td>
<td></td>
<td>HUMBOLDT</td>
<td>1½ “ 110° “</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>E</td>
<td>X2</td>
<td>1</td>
<td>00.28</td>
<td>A</td>
<td></td>
<td>HEUMAR</td>
<td>5 “ 100° “</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>00.29</td>
<td>B</td>
<td></td>
<td>AUTOBAHN “FLYOVER”</td>
<td>3½ “ 170° “</td>
</tr>
<tr>
<td>6</td>
<td>419(TR)</td>
<td>S</td>
<td>X3</td>
<td>2</td>
<td>01.25</td>
<td>B</td>
<td>HAMSTEDE A/D</td>
<td>N.W. HAMSTEDE A/D</td>
<td></td>
</tr>
</tbody>
</table>

*Table entries relating to Le Havre have not been transcribed.
INTERPRETATION REPORT NO. K. 1319

(Already outlined in Immediate Report No. K.1315)

Photographs taken by No. 1 P.R.U. on 25.4.42 & 29.4.42

SORTIES A/647 & A/675

Scale: A/647 - 1/7,900
A/675 - 1/8,800

LOCALITY: COLOGNE

DAMAGE ASSESSMENT

Photographs are of good scale. The quality of A/647 is only fair; the quality of A/675 is excellent, but the stereoscopic overlap is poor. The central city area is well covered; the W. suburbs are not fully covered, and there is poor cover of the E. bank.

PERIOD UNDER REVIEW

The last detailed report (K.1309) on photographs taken on 15.4.42 was issued on 27.4.42. The town has been attacked twice since then on 22/23.4.42 and 27/28.4.42.

GENERAL STATEMENT AND DISTRIBUTION OF DAMAGE.

Major damage is concentrated in the central city area, and damage in the W. suburbs is relatively slight. Four large areas are severely damaged, and may be considered devastated. An area to the W. of the CATHEDRAL and MAIN STATION, of approximately 350 x 260 yards, is severely damaged by H.E. and fire, and includes government offices. Another devastated area is seen between ULRICH TRASSE and KARTHAUSER STRASSE. This is approximately 320 yards across, and includes 7 blocks of buildings which are completely burnt out. Close to this, between HEINRICH STRASSE and ULRICH'S GASSE another area of approximately 290 x 110 yards contains a number of gutted buildings, including the MARIA KIRCHE. A further area around the WALDMARKT and GEORGS PLATZ, of approximately 270 x 110 yards, contains 9 gutted buildings and 4 others severely burned. Other damaged buildings include the MARIEN HOSPITAL, the RAUTENSTRAUCH JOST MUSEUM, ST. PANTALEON'S CHURCH, TRINITY CHURCH, and the MONOPOLE-METROPOL HOTEL. It is interesting to note that nearly all the damage is by fire.
DETAILS OF DAMAGE.

Central City Area.

Between KOMODIEN STRASSE and GEREON STRASSE, an area of approximately 350 x 260 yards is seriously damaged by H.E. and fire. The government offices in this area are seriously affected. The roof of one wing is missing, and the upper floors are burned out; two-thirds of the roof of the main building has collapsed. And half the adjoining building is partially destroyed. Several other buildings in this area are seen to be either burned out or damaged.

In AM HOF, the roof of a building is damaged. The top floor of the MONOPOL-METROPOL HOTEL in WALLWRAFS PLATZ is gutted. The roof and upper rooms of a large building or buildings at the corner of RICHARTZ STRASSE and MINORITEN STRASSE are gutted. On the E. side of HOHE STRASSE a building is gutted. Trinity Church in AM FITZENGRABEN is gutted.

Suburban Districts (W. Bank)

The RAUTENSTRAUCH JOST MUSEUM in UBIER RING is roofless at the E. end. Five or six houses at the corner of KAROLENGER RING and BRUNO STRASSE are gutted, and at the W. end of MATERNUS STRASSE the roof of a building is damaged.

Between ULRICH STRASSE and KARHAUSER STRASSE there is a devastated area of approximately 44,000 square yards. Seven blocks of buildings, including probably a hospital, are completely burnt out. The roof of a Post Office is badly scorched and other houses are gutted.

Another devastated area approx. 290 x 110 yards is seen between HEINRICH STRASSE and ULRICH GASSER. The MARIA KIRCHE and other buildings are gutted and a school in WALL PANTALEONS is gutted.

A damaged area of approximately 270 x 110 yards is seen around the WALDMARKT and GEORGS PLATZ. About 9 buildings are gutted and 4 others are severely burned.

In AM TRUTZENBERG, a house is gutted, and the house opposite is severely damaged by fire.

In WAISENHAUS GASSE, ST. PANTALEONS CHURCH is badly damaged. The roof of the church is burnt and part of the vaulting destroyed. Long buildings around the Church are gutted.

At the junction of DAGOBERT STRASSE and DOM STRASSE 4-5 houses are gutted. Near NIEDERICH STRASSE, 2 bays of the MARIEN HOSPITAL are severely damaged by fire.

1-2 houses adjoining ST. KUNIBERT CHURCH are gutted.

1-2 houses on the S. side of DAGOBERT STRASSE are partially demolished. A block of houses is gutted at the corner of MAINZER STRASSE and TEUTOBURGER STRASSE.

In ALTERBURGER WALL a crater is seen in front of a row of houses, some of which show signs of blast.

The roofs of 2 houses in ZULPicher STRASSE are stripped and the roofs of 2 houses in GORRES STRASSE are damaged.
BAYENHAL.
The end portion of a roof of a building is either gutted or stripped in ALTEBURGER STRASSE.

ARNOLDSHOHE.
In MANNESHELD STRASSE, S. of BONNTOR GOODS STATION, 2 buildings are gutted, and there is roof damage to 2 or 3 houses. Between RADERBERG STRASSE and BRUHLER STRASSE the roof of the end wing of an industrial building is partially demolished.

SULZ.
The factory at the junction of WEISS HAUS STRASS and RHONDORFER STRASSE, mentioned in Report K.1309 as having probably received a direct hit, is seen to have half the roof stripped, and part of one wall missing. To the S. of KOLN – SULZ GOODS STATION 2 buildings are partly destroyed by H.E. and a third damaged by fire; on the N. side of this Goods Station there is a large hole in the roof of a warehouse.

Two prints distributed. X Prints not distributed

SECRET
Page 3

INTERPRETATION REPORT NO. K. 1319 (Cont’d)

APPENDIX ‘A’

Reference to Annotations (sic) of Prints Distributed A/675

1. Roof damage to building in MATERNUS STRASSE. 5-158
2. RAUTENSTRAUCH JOST MUSEUM in UBIER RING
3. Gutted houses at corner of KAROLINGER RING and BRUNO STRASSE.
4. Devastated area between ULRICH STRASSE and KARHAUSER STRASSE.
5. Devastated area between HEINRICH STRASSE and ULRICH’S GASSE.
6. School in WALL PANTALEONS.
7. Devastated area around WALDMARKT and GEORGS PLATZ.
8. Gutted house in AM TEUTZENBERG.
9. ST. PANTALEON’S Church.

1. Devastated area between KOMODIEM STRASSE and GERECH STRASSE. 5/160
2. Damaged building in AM HOF.
3. MONOPOL-METROPOL HOTEL.
4. Gutted buildings at corner of RICHARDZ STRASSE and MINORITEN STRASSE.
5. Gutted building in HOHE STRASSE.
6. TRINITY CHURCH
7. Possible roof damage to building in E. THIEBOLDGASSE.
<table>
<thead>
<tr>
<th></th>
<th>Distribution</th>
<th>Reports</th>
<th>Prints</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.A.F. STATION,</td>
<td>H.Q.B.C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDMENHAM</td>
<td>C. in C.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>K/WW/B</td>
<td>G/C Ops. For S.A.S.O.</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Intelligence</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>P.I.Sub-Section.</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>O.R.S</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Narrative Officer.</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Groups and Stations.</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Ops 1 (b)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>W/Cdr. T.A.I.</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>W/Cdr. Navigation</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>H.Q.C.C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.D.I. (Ph)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Intelligence</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Air Ministry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P.A. to C.A.S.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>A.M. War Room.</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>A.I.3 (c) S/Ldr. Burgess.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>D.D.A.T.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>D.D. Photos.</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>D.B.Ops.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>D.P.R</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>C.I.U.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.E.W. (Air Liaison)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>M.H.S (W/Cdr. Lowe)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>P.R.U. Benson (Int)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *** number not legible
IMMEDIATE INTERPRETATION REPORT NO.K.1333.

Photographs taken by 1 P.R.U. on 1.6.42.


Scales: 1/14,500  1/8,700  and  1/7,000

Locality: COLOGNE

DAMAGE ASSESSMENT.

These sorties were taken after the attack on 30/31.5.42. Sorties A/840 and A/849 are of variable quality and cloudy; Sortie A/844 is of good quality but only covers isolated parts of the city.

DAMAGE.

There is heavy and widespread damage distributed over the whole town, much of this is due to fire.

1. The largest areas of destruction are in the Old City. It is estimated that in an area of approximately 200 acres most of the buildings are gutted or damaged: this area includes, however, many points of damage from previous attacks. Serious incidents are seen in almost every part of the central city area.

2. EHRENFELD district E. of city gasworks. A large industrial area approximately 1550 x 440 yds. very severely damaged.

3. KÖLN NIPPES. N. of town. Railway Workshops very severely damaged.


5. KÖLN – DEUTZ. E. bank. Exhibition Hall partly destroyed by fire.

6. KÖLN MULHEIM. TYRE FACTORY.

Two large buildings covering areas approx.: 300 x 120 yds. and 120 x 60 yds. respectively, destroyed by fire.

7. KÖLN MULHEIM. E. side of the MAFEN. Group of factory buildings, including those of WESTDEUTSCHE WAGGONFABRIK A.G. and HUMBOLDT DEUTZ MOTOREN A.G. seriously damaged.

8. KÖLN KALK. HUMBOLDT DEUTZ. Two points of damage to the works.
No prints distributed.

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.Q.B.C</td>
<td></td>
</tr>
<tr>
<td>C. in C.</td>
<td>1</td>
</tr>
<tr>
<td>G/C Ops. For S.A.S.O.</td>
<td>1</td>
</tr>
<tr>
<td>Intelligence</td>
<td>1</td>
</tr>
<tr>
<td>P.I.S.S.</td>
<td>4</td>
</tr>
<tr>
<td>Narrative Officer.</td>
<td>2</td>
</tr>
<tr>
<td>Groups and Stations.</td>
<td>98</td>
</tr>
<tr>
<td>Ops 1 (b)</td>
<td>1</td>
</tr>
<tr>
<td>W/Cdr. Nav.</td>
<td>1</td>
</tr>
<tr>
<td>O.R.S</td>
<td>1</td>
</tr>
<tr>
<td>W/Cdr. T.A.1</td>
<td>1</td>
</tr>
<tr>
<td>H.Q.C.C</td>
<td></td>
</tr>
<tr>
<td>A.D.I. (Ph)</td>
<td>1</td>
</tr>
<tr>
<td>Intelligence.</td>
<td>1</td>
</tr>
<tr>
<td>Air Ministry</td>
<td></td>
</tr>
<tr>
<td>War Room.</td>
<td>2</td>
</tr>
<tr>
<td>A.I.3 (c) S/Ldr. Burgess.</td>
<td>1</td>
</tr>
<tr>
<td>D.D.A.T.</td>
<td>1</td>
</tr>
<tr>
<td>D.D. Photos.</td>
<td>2</td>
</tr>
<tr>
<td>P.A. to C.A.S.</td>
<td>1</td>
</tr>
<tr>
<td>D.P.R</td>
<td>2</td>
</tr>
<tr>
<td>A.D.I. (Ph)</td>
<td>6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
</tr>
<tr>
<td>M.E.W. (Air Liaison)</td>
<td>1</td>
</tr>
<tr>
<td>M.H.S (W/Cdr. Lowe)</td>
<td>1</td>
</tr>
<tr>
<td>Admiralty (N.I.D)</td>
<td>2</td>
</tr>
<tr>
<td>P.R.U. Benson (Int)</td>
<td>1</td>
</tr>
<tr>
<td>C.I.U.</td>
<td>12</td>
</tr>
</tbody>
</table>
INTERPRETATION REPORT NO. K. 1333.

Photographs taken by I.P.R.U. and 105 Sqdn. between 1.6.42 and 5.6.42.


Contact Scales: 1/14,500, 1/9,600, 1/9,000, 1/9,700

LOCALITY: COLOGNE.

DAMAGE ASSESSMENT.

These seven sorties taken together with photographs of variable quality of the whole of the town and suburban districts on both sides of the Rhine.

PERIOD UNDER REVIEW.

These sorties were taken after the attack on 30/31.5.42. The last report on COLOGNE (K.1325) was issued on 9.5.42.

GENERAL STATEMENT.

Damage seen in COLOGNE resulting from this raid is on a larger scale than anything yet seen in any German city.

Damage is heavy and widespread. Not only are large areas of the centre of the city devastated, involving the destruction of public and administrative buildings and business premises, but industrial and residential property in all the suburban areas have been seriously affected by fire and H.E.

Apart from the devastation extending over approximately 300 acres in the centre of the city, areas of particularly severe damage are seen in the W. suburbs and in the industrial areas of the E. bank.

It is estimated that over 250 factory buildings and workshops have been either destroyed or seriously damaged, and that well over 3000 houses are uninhabitable.

Of the whole area over 600 acres have been destroyed.

DETAILED STATEMENT.

(All measurements are approximate.)

CENTRAL CITY AREA.

Many serious incidents are seen in every part of the Central City, in addition to the following areas of devastation. 3 areas are seen in the vicinity of the NEUMARKT. To the N.W. is an area of 32 acres, in which most of the buildings are gutted. 50-70 buildings are affected,
including the METROP THEATER, the APOSTELN KIRCHE, and the offices of the BROWN COAL SYNDICATE.

To the S. in an area of 11 acres, 30-35 buildings are gutted or damaged.

A third area of 4½ acres occurs to the S.W. of the NEUMARKT, where 18-20 houses are burnt out.

An area of 4 acres, off the SALLER RING, is devastated. Approximately 75 houses, a school, and several small factory buildings are involved.

Several buildings in an area of 2 acres S.E. of MAURITIUS PLATZ are gutted.

In an area of 5 acres adjacent to the above 40-45 houses are gutted or destroyed by H.E.

---------------------------------------------------

A devastated area of 18 acres lies to the W. of ULRICH'S GASSE, in which about 80 buildings are gutted by fire. About 20 buildings are damaged by fire or H.E. in the vicinity of SEVERIN STRASSE.

S.W. of the HANGE BRUCKE, in an area of 75 acres, 300-400 buildings have been burnt out or destroyed. This includes severe damage to the BURGER Hospital and a number of churches.

In the RHEINAU HAFEN, two warehouses of 190’ x 40’ and 290’ x 70’ are seen to be gutted.

In an area of 17 acres between the CATHEDRAL and the HANGE BRUCKE, 40 or 50 buildings are gutted or very severely damaged. Buildings immediately adjacent to the S.E. wall of the CATHEDRAL are gutted. There is no photographic evidence of damage to the CATHEDRAL, although the damage to the adjoining buildings suggests that some minor damage may have occurred.

In an area of 35 acres extending from the LAW COURTS and the NEUMARKT westwards almost to HOHENZOLLERNRING, some 200-300 houses have been destroyed, including the POLICE HEADQUARTERS.

An area of 3½ acres between ST. GEREONS CHURCH and the HOHENZOLLERNRING has been completely burnt out.

An area of 4½ acres N. of CAECILIEN STRASSE, including a POSTAL AND TELEGRAPH OFFICE and 30 – 40 buildings has been devastated.

10 or 12 buildings on the E. side of HOHE STRASSE have been damaged by fire and H.E.

A number of devastated areas occur around the HAUPTBAHNHOF. To the N.W., in an area of 4 – 5 acres 30 – 40 houses and buildings are destroyed. ST. URSULA KIRCHE is very severely damaged. Another area of 3 acres to the N.W. of the station, has 20 – 25 houses gutted by fire.

N. of the station 80 – 100 houses are affected b fire and H.E. Between the HAUPTBAHNHOF and the KAISER FRIEDRICH UFER, in an area of 8 acres, 5 or 6 large buildings including the RAILWAY INSPECTORATE AND ADMINISTRATION OFFICES are severely damaged.

Many other serious incidents occur along both sides of the main line running W. from the station.

The POST OFFICE ADMINISTRATIVE BUILDINGS, at the corner of CLAVER STRASSE and WORTH STRASSE are severely damaged.

E. of St. Kunibert’s Church 12 – 14 houses have been severely damaged by fire and H.E.
On the W. of the city area, N. of RATHENAU PLATZ, about 40 houses are gutted by fire.

Within the S. limit of the Central City area, around the UNIVERSITY, many points of damage by fire and H.E. are seen. About 100 houses are affected.

In the same area the City Water and Electricity Works are damaged. The roof of the main building is damaged, the end portion of the roof of a long shed is stripped, and the end of another shed damaged.

In the area to the W. of the city between the S. and W. stations and the SACHSEN, SALIER AND HOHEN STAUHEN RINGS several areas of severe damage are seen. To the N.W. of the SUD BAHNHOF in an area of 14 acres, 40 – 50 buildings are gutted by fire. In other areas around the SUDBAHNHOOF over 90 houses are gutted. N. of RATHENAU PLATZ a further 40 houses are burnt out. Near the WESTBAHNHOF about 65 houses are destroyed by fire. Severe damage to the upper floors of the AUGUSTA HOSPITAL near the SUD BAHNHOF is seen.

INDUSTRIAL AND COMMERCIAL.

Apart from a large number of factories which have not been identified, the following have been destroyed or damaged.

A. WEST BANK.

ELEKTRA STAHLRAHT FABRIK: (Steel-rope factory): 20 buildings destroyed.

ALLGE[illegible text] OEL-HANDELS-GES (Oil Storage): almost completely destroyed.

EISEN [illegible text] (Foundry Products): 8 factory buildings gutted.


EHNAG. ELECTRA-HOH-UND-NIEDERSPANNUNGS APPARATE: 7 buildings gutted.

BRUNO KAMPEL (Dye Stuffs): 2 or 3 buildings destroyed.

KOLN EHRENFELDER MASCHINENBAU ANSTALT (machinery): 2 large buildings gutted.

VEREINIGTE DEUTSCHE METAILWERKE (Metal Works): 10 sheds gutted.

JAK SCHLOSSEN (warehouses for Chemical products): 7 buildings gutted.

A. SCHMETZ (Sheet Iron): almost completely burnt out; at least 12 buildings destroyed.
ATLANTIC GUMMIWERKE ALOYS WEYERS (Rubber factory): Large workshop destroyed.

MAUSER K.G. (Steel factory): 7 sheds destroyed.

NUSSBAUK & CO. (Dye factory): 4 buildings with roof damage.

STEINHART ELEKTRA MAGNETOBAU (Electric Magnet Works): Almost completely destroyed.

L. BOCK (Electric Motor Repairs) Workshop completely gutted.

RAILWAY WORKSHOPS (NIPPES): Main building and 2 sheds gutted by fire and damage to large workshops and other buildings.

FRANZ CLOUTH (Rubber Works): 2 large and 2 small sheds almost entirely destroyed: a fire seen still burning.

POELIG A.G. (Machinery) 8 sheds demolished by H.E.

THOMAS & CO (Rubber Works) and ULLMANN ALB. (Metal Goods): At least 12 sheds destroyed.

BALFER EWALD (Engineering): 9 sheds and other buildings demolished.

KOLNER/WERKZEUG MASCHINENFABRIK (Machinery): 1 shed gutted.

HARTMANN & CO. (Glassware): 2 sheds gutted and damage to other buildings.

BERLIN ANHALTISCHE MASCHINENBAU (Blast furnace & chemical works): 1 shed destroyed, 3 partly demolished and 3 or 4 sheds damaged.

MASCHINENFABRIK RHENANIA EHRENFELD: Long shed has had part of roof stripped.

KOLNER BAUMWOLL SPINNEREI: Extensive damage; only the walls remain standing.

KOLNISCHER GUMMIFADEN FABRIK (Tyre factory): the main shop and 5 other buildings have been completely destroyed.
VEREINIGTEWEST - DEUTSCHE WAGGON FABRIKEN (Rolling Stock): one large building and 10 other buildings seriously damaged.

HUMBOLDT DEUTZ MOTOREN (Submarine engines): 6 buildings destroyed and 2 severely damaged.

HUMBOLDT DEUTZ MOTOREN (KALK) (Submarine Engines): additional damage.

FELTEN and GUILLAUME CARLSWERK (undercarriages): 7 large buildings severely damaged and 3 gutted.

HAGEN GOTTFRIED A.G. (accumulators and batteries for submarines): Severe roof damage to a factory building.

CHEMISCHE FABRIK, KALK (Chemical Works): Damage to roof of building.

WERKZEUGSMASCHINENFABRIK SCHUTTE (machine tools): large factory building destroyed.


ANDRAE CRIST (velvet manufacturer): 3 large factory buildings gutted.

RESIDENTIAL.

W. BANK.

Serious damage to residential property is widespread in suburban districts. More than 50 houses in SULZ, 120 in LINDENTHAL, 75 in EHRENFELD, 40 in RIEHL and 170 in NIPPES-SECHZIG have been completely destroyed or so seriously damaged as to be inhabitable. Incidents of fire and H.E. are seen in every district covered by the Sorties.

E. BANK.

Damage to residential property on the E. bank appears to be less serious than in the W. suburbs, but at least 125 houses, scattered over the whole area of DEUTZ, KALK and MULHEIM appear to have been made untenantable. Extensive damage is seen to the EXHIBITION BUILDINGS and to the RHEIN MUSEUM.

COMMUNICATIONS.

A striking feature of the raid was the amount of damage done to the railway communications of the city, causing serious, if only temporary, interruption of the traffic.
At MULHEIN STATION considerable damage is evident and it is probable that 5 tracks have been affected.

INTERPRETATION REPORT NO. K. 1333 (Cont’d)

The Engine Sheds and Passenger Storage Sidings at KOLN – GEREON have been affected by blast and a number of coaches of two electric trains appear to have been completely destroyed and others damaged by fire.

The branch line at EHRENFELD has been severely damaged by 3 direct hits.

Some sheds in the EIFELTOR MARSHALLING YARD have been demolished and trucks scattered by H.E.

The track and embankment works west of the SUD BAHNHOF have been damaged by direct hits.

The signal control tower at the end of the North platform of the HAUPTBAHNHOF has been destroyed.

Some minor damage is seen to the S.E. portal and lattice work of the HOHENZOLLERN BRIDGE but this does not appear to have seriously affected communications.

Appendix A refers to annotated mosaic covering Central City Area and E. Bank.

Appendix B refers to COLOGNE W (EHRENFELD)

Town plan uses Pharus Plan.

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Reports</th>
<th>Prints</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.A.F. STATION, MEDMENHAM.</td>
<td>H.O.B.C</td>
<td></td>
</tr>
<tr>
<td>C. in C.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>G/C Ops. For S.A.S.O.</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Intelligence</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>P.I.S.S.</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Narrative Officer.</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Groups and Stations.</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Ops 1 (b)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>W/Cdr. Nav.</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>O.R.S</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>W/Cdr. T.A.1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>H.O.C.C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.D.I. (Ph)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Intelligence.</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

SECRET
Prints.
<table>
<thead>
<tr>
<th>Service</th>
<th>Code</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>War Room</td>
<td></td>
<td>2 2</td>
</tr>
<tr>
<td>A.I.3 (c) S/Ldr. Burgess</td>
<td></td>
<td>1 1</td>
</tr>
<tr>
<td>D.D.A.T.</td>
<td></td>
<td>1 1</td>
</tr>
<tr>
<td>D.D. Photos</td>
<td></td>
<td>2 1</td>
</tr>
<tr>
<td>P.A. to C.A.S</td>
<td></td>
<td>1 1</td>
</tr>
<tr>
<td>D.P.R</td>
<td></td>
<td>2 2</td>
</tr>
<tr>
<td>A.D.I. (Ph)</td>
<td></td>
<td>6 6</td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.E.W. (Air Liaison)</td>
<td></td>
<td>1 1</td>
</tr>
<tr>
<td>M.H.S (W/Cdr. Lowe)</td>
<td></td>
<td>1 1</td>
</tr>
<tr>
<td>Admiralty (N.I.D)</td>
<td></td>
<td>2 2</td>
</tr>
<tr>
<td>P.R.U. Benson (Int)</td>
<td></td>
<td>1 1</td>
</tr>
<tr>
<td>C.I.U.</td>
<td></td>
<td>12 -</td>
</tr>
</tbody>
</table>
INTERPRETATION REPORT NO. N.26

THE COURSE AND DEVELOPMENT OF THE ATTACK ON KÖLN 30/31.5.42.

1. Lines of Investigation.

This highly successful operation produced most interesting photographic material to illustrate the development of a concentrated attack. A first examination of the evidence (see Report N.S.18) showed that while the centre of the City had rapidly become a confused expanse of fires, there had also been a certain spread into the neighbouring country, while decoys had been active. Therefore further work has been undertaken with the main object of investigating the fall of incendiaries in outlying districts, studying the extent to which the attack had been diverted from its target, and securing plottings of previously unplotted aircraft, of which a list is appended.

2. Limiting Factors.

Photographs were attempted between 0010 hrs and 0241 hrs., and successful results, since plotted by ground detail, were obtained between 0048 hrs and 0235 hrs. The fire mosaic accompanying this report was compiled from films exposed in aircraft which attempted photographs throughout this period.

 Particularly to the West and to the South it extends beyond the area covered by successful photographs. Considerable work has failed to produce evidence of any diversion beyond the limits of the diagram, though such a possibility can never be entirely ignored.

3. General Impression.

The main weight of the attack fell on KÖLN, and the centre of the fall of incendiaries seems to have been close to the centre of the built-up area.

In the early stages, numbers of sticks formed a recognisable pattern in the city and it was thus possible to plot several aircraft whose films had recorded no ground detail. Later, the fall of many additional sticks and the development of numerous fires scattered throughout the area, made it almost impossible to say with confidence that any particular aircraft had been over any particular set of fires, although it is apparent that many a/c which recorded no photographs did in fact run over the city. A similar state of affairs occurred on the outskirts to the S. and W. (areas B, C and D on diagram). Thus the attempt to record in detail the course of the attack within the built-up area met with great difficulty. This in itself is clear proof of the outstanding success of the operation.

On the other hand sticks of incendiaries were identified up to 7½ m. to the W (FRECHEN) 10 m. to the S. (URFELD) 5 m. to the S.E. (HEUMAR) and 4 m. to the N (NIPPES Marshalling Yard). It was in the outlying districts that it was possible to recognise fires and incendiaries during the later periods.
Altogether 78 sticks were distinguished in areas ‘A’ to ‘D’ on the diagram i.e. the mainly built-up districts. A further 43 were counted in areas E to H, but it must be emphasised that these figures are not strictly comparable. It is a fair assumption that many sticks fell in the City during the later period when they could not be identified among the already existing fires, while it is not so likely that many more fell in the outlying districts.

Possibly as a result of the concentration of fires there is in our night photographs little evidence of the fall of H.E.

4. Fires and Incendiaries.
   A. Two-mile radius from Cathedral.

   Sticks of incendiaries were photographed in all parts of this area before

   …………………………………………………………………………………………………

   SECRET.

   Page 2.

   0100 hrs., and were recognisable on many films which recorded them before 0115 hrs. After this time definite dentification became difficult although parts of sticks, as well as established fires, were pin-pointed on a number of occasions between 0120 hrs. and 0215 hrs. Consequently, as already noted, our evidence is not complete as regards the full number of sticks. Of 17 sticks identified within 1m. circle 16 occurred before 0115 hrs. Within the 2m. circle 27 further sticks were recorded, 23 of them being noted before 0115 hrs. (see prints Nos. N.26/1, N.26/2).

   B. Suburbs towards BICKENDORF. 3 m. radius.

   Fires were recorded between 0110 hrs. and 0149 hrs. Seven sticks were seen, whose grouping and overlap left a pattern which could be recognised for some time after the individual sticks could no longer be distinguished.

   C. S.W. Suburbs (LINDENTHAL). 3m. radius.

   Fires were seen between 0048 hrs. on the earliest photograph taken and 0149 hrs. Nine sticks were recorded, in addition to which there were a number of scattered fires which could not be related to any of them.

   D. S. Suburbs (ZOLLSTOCK to POLL.) 3m. radius.

   The area between the EIFELTOR Marshalling Yard and the Rhine was photographed at 0058 hrs. by H/75 (print No. N.26/3) when no fires were visible. A photograph of the same area (print No. N26/4) taken 4 minutes later by E/218 shows incendiaries beginning to burn. Further sticks were seen at frequent intervals until 0121 hrs. when a stick was seen beginning at ARNOLDSHOHE. There is no later record of this area. Total no. of sticks 13. On the E. side of the river at POLL, 5 sticks were recorded between 0059 hrs. and 0209 hrs.

   E. N.W. Outskirts (LÖVENICH. MÜNGERSDORF, NIPPES).
Twelve sticks were recorded at times ranging from 0048 to 0235 hrs. Sticks near MÜNGLERSDORF were seen beginning at 0048 hrs. and 0110 hrs. Two sticks forming a horse-shoe to the W. of BICKENDORF were seen at 0102 hrs., 0112 hrs. and at 0113 hrs. but had disappeared when a third stick was recorded in the same neighbourhood at 0149 hrs. A photograph at 0235 hrs., taken by the last aircraft plotted at KÖLN (by ground detail), showed only isolated fires at NIPPES Marshalling Yard and at OSSENDORF. (See N.26/5).

F. S.W. Outskirts (MARSdorf, FRECHEN).

One stick in open country to the S.W. of MARSdorf was seen starting at 0100 hrs. and two more were photographed at 0112 hrs. near the outskirts of the city. Otherwise this area was not covered until after 0130 hrs. Thus the other sticks were seen only during the later part of the operation, the last time being 0149 hrs. The stick seen starting at 0100 hrs. was recognisable as scattered fires only at 0149 hrs. Nine sticks were counted. (see N.26/6 N.26/7.)

G. S. Outskirts (RODENKIRCHEN, URFELD).

Scattered sticks extending to the S. were seen at times ranging from 0100 hrs. to 0110 hrs. A few isolated fires were photographed after 0200 hrs. between RODENKIRCHEN and WEISS. Eight sticks were counted. (See N.26/9, N.26/10).

H. E. Outskirts (MÜLHEIM, NEUMAR, URBACH).

Two sticks in a built-up area at MÜLHEIM were photographed at 0100 hrs., and the fires they caused were distinguishable at 0149 hrs. The earliest stick photographed to the E. was one seen at 0059 hrs. Sticks near the river bank were recorded at 0115 hrs. Otherwise there is no record of this area until after 0200 hrs. At that time fires were still burning along the line of the stick seen starting at 0059 hrs. Other sticks had fallen in the interval, and isolated fires were recorded between 0202 hrs. and 0230 hrs. (See N.26/8).

Note on Duration of Sticks. Many of the early sticks of I.B’s were seen only for a very short time although in areas which were covered on a number of occasions. It would seem, therefore, that efforts to put them out had met with some success, but it appears obvious that as the raid grow in intensity the A.R.P. services could not cope with the numerous outbreaks.

5. Defences.

A. S/L. and Flak.
23 searchlights were identified in action and their positions confirmed by day cover, (marked on trace).

In three cases a searchlight was first noted in action in an area free from fires and incendiary bombs, and when the same spot was photographed subsequently a stick of incendiaries had been dropped across the site of the S/L which was not then seen. For an instance compare N.26/3 and N.26/4.

Three flak batteries were also noted in action at ZOLLSTOCK (N.26/3), MÜNGERSDORF (N.26/5), an S. of NIPPES MARSHALLING YARD (See Diagram).

B. Decoys

Fires were plotted on the sites of the following decoys: COLOGNE 1 (LÖVENICH), COLOGNE 2 (GODORF), COLOGNE 4 (HEUMAR), COLOGNE 12 (MARSdorf). In one case only were complete tracks recorded with ground detail of the decoy site (MARSdorf: N.26/6). That the other three were in action was only determined in the course of constructing the fire Mosaic.

COLOGNE 1. (LÖVENICH).

Two fires of moderate dimensions on the site of this decoy, were recorded at 0110 hrs. by X/26 O.T.U. (see notes to N.26/5), and at no other time. The nearest recorded stick was three-quarters of a mile away, and was nearer to MÜNDERSDORF than to the decoy.

COLOGNE 12. (MARSdorf).

A photograph showing ground detail was obtained at 0132 hrs. (N.26/6). The track was also recorded at 0142 hrs. and 0149 hrs. (N.26.7). There is slight evidence that this decoy may have been coming into operation at 0112 hrs.

Three sticks to the N.E. were burning at that time. When the decoy fires were next seen at 0132 hrs. these three sticks were still burning, and another had appeared about a mile to the N.

COLOGNE 2. (GODORF).

The film exposed by R/9 at about 0100 hrs., although it shows no ground detail, covers the same incendiaries as those in N.26/1, and also provides a record of the fires and incendiaries then burning over an area which extends seven miles to the S. One group of fires is pinpointed on the site of the GODORF decoy, and displays a remarkable conformity with the layout shown by day photographs. There is no evidence in films exposed during the raid to suggest that the decoy attracted any attention, except for a few small scattered lights to the N., which may represent incendiaries dying out. The nearest complete stick is 1½ miles to the S. (See N.26/9).

SECRET
COLOGNE 4. (HEUMAR).

See notes on N.26/8. The film, exposed late in the raid, by C/10 at 0222 hrs., shows tracks of a row of fires or lights, at least three of which were situated in the HEUMAR decoy site.

The nearest fires were burning farm buildings at NEUENHOF. The tracks of these, as of the fires in the Marshalling Yard, are much more intense than those passing through the site of the decoy.

C. Note on the Defences.

If a line were extended from the Cathedral to the N.W. and the S.E., 21 out of 23 searchlights plotted on the diagram, would lie to the S. and W. of it. The remaining two would lie only slightly to the N. and E. of the line. Similarly, three out of four decoys identified in operation, lie to the S. and W. of the City – HEUMAR alone being to the S.E.

It has been suggested that the enemy at times endeavours to mislead aircraft by accentuating defences on one side of a target. (for a discussion see Interpretation Report No.Q.48). Photographic evidence embodied in the diagram (see para. 2) suggests that such an “off centre” bias may have obtained on this occasion. If so, it would appear that no great proportion of the weight of the attack was in fact diverted from built-up areas. The extent of the evidence does not permit any conclusion as to the influence of the enemy’s defence strategy on the development of the attack within the boundary of the city itself.

6. ANNOTATED PRINTS

A. KÖLN and Suburbs.

1. 1502/8 Print 1 T. (Z) 75. 0103 hrs. A.

   Plotted position KÖLN, Southern half of city. Carried H.E. bombs.

   1. A stick of H.E. bombs bursting by the River, one of them in the RHEINAU HAFEN.

   2. Bomb Flames.

   The print also shows tracks of at least five incendiary sticks as well as scattered fires. The situation is typical of the early stages of the attack, and the sticks formed a pattern which was clearly recognisable until 0110 hrs., and of which the main lines could still be distinguished at 0120 hrs.

2. 1502/9 Print 1 F (X2) 57. 0058 hrs. A.

   Plotted position GEREON Marshalling Yard. Carried 4 lb. incendiary bombs.
At this early period of the attack, tracks of six sticks of incendiaries could be seen, covering a wide area in the Northern part of the city. One was not seen again, but fires following the lines of others, could be recognised as late as 0155 hrs.

3. 1502/6 Print 1.H (Z10) 75. 0058 hrs. A.

Plotted position ZOLLSTOCK. 2 m. S. of Cathedral. Carried 810 x 4 lb incendiaries, and 4 x 500 lb. H.E. This photograph shows the greater part of the district to the S. of the city between the EIFELTOR Marshalling Yard and the Rhine.

1. Track of searchlight. Its position is indicated.
2. Heavy flak muzzle flames. There is a six-gun position a short distance N.W. of the searchlight.

4. 1502/43. Print 1 E(X5)218. 0102 hrs. A.

Plotted position ZOLLSTOCK, 2 m. S. of Cathedral. Carried 1890 x 4 lb. incendiaries.

The area enclosed by the dotted lines corresponds with that covered by N26/3, taken four minutes earlier, with which this is to be contrasted.

1. Smoke, sources indicated. No explanation of its origin is offered.
2. Tracks of incendiaries, some beginning – an early stage of the attack.
3. Light reflected by the water of the Rhine.

B. Outlying Fires and Decoys.

5. 1502/47 X(Z1) 26 O.T.U. Print 1 0110 hrs. A.

Plotted position S. of MÜNGERSDORF, 3½m. W. of Cathedral. Carried 30 lb. incendiaries, and 3 x 500 lb. H.E.

1. Small bomb flame.
2. Muzzle flames. Two six-gun batteries are situated here. Three three-gun salvoes are shown in this frame, while four-gun salvoes were recorded on the next. Both batteries appear to have been in action. Tracks are shown of:
3. 30 lb. incendiary bombs beginning to burn.

Examination of the next frame to this picture enabled fires to be pinpointed on the site of the LÖVENICH Decoy.

6. 1502/63. A(X) 23 O.T.U. Print 1. 0132 hrs. A.
Plotted position E. of MARSDORF, 4 m. W.S.W of Cathedral. Carried incendiary bombs. Shows tracks of:-

1. Fires at MARSDORF decoy, the site of which lies at the point indicated.
2. Incendiaries burning out in parkland.

7. 1502/36. U(X3) 156. Print 1. 0149 hrs. A.

Plotted position between FRECHEN and MARSDORF, 5 m. W. of Cathedral. Carried 540 x 4lb. incendiaries.

Taken late in the raid, this photograph shows tracks of:-

1. MARSDORF Decoy. Its operation on this night produced a recognisable track (c.f. Report Q.48), which was also recorded at 0132 hrs., (N26/6) and at 01.42 hrs.
2. S/L. to N.E. of decoy. (See diagram)
4. Fires at FRECHEN, recorded also by X (Z) 10 O.T.U. at 0140 hrs.
5. Incendiaries starting N.E. of FRECHEN.
6. Fires and incendiaries in the LINDENTHAL area.


Plotted position GREMBERG Marshalling Yard, 4½ m. S.E. of Cathedral. Carried incendiaries and 3 x 1000 lb. H.E.

Exposed late in the attack, the film from which this print is taken, provided valuable information about the spread of fires to the S.E. of the City.

The print shows tracks of:-

1. Considerable fires, burning apparently in open country. Smoke illuminated by the photo-flash indicates the location of the fires on the ground, and hence their position on the track. Examination of day photographs shows that the two farm buildings were gutted at NEUENHOF, at the source of the smoke trail.
2. Fires burning in the GREMBERG Marshalling Yard.
3. A light which may be part of the HEUMAR decoy system or the last trace of incendiaries close to it. (The decoy itself lies off the photograph a little to the E.)


Not plotted by ground detail.
Carried 810 x 4lb. incendiaries.
Shows tracks of:-
1. Fires pinpointed on the site of the GODORF Decoy.
2. S/L. W. of GODORF (See Diagram)
3. S.L. to the S. ( “ “ )
4. S.L. further S. ( “ “ )
5. S.L. to the W. ( “ “ )
6. Sticks of incendiaries burning to the S.W.

10. 1502/35 E(Y3) 156 Print 1. 0106 hrs. A.

Plotted position S.W. of URFELD, 10 m. S. of Cathedral.
Carried incendiaries.
Shows tracks of:-

1. The most outlying stick identified. It was dropped at a time when fires were already well established in the City, and fell across a 3-gun light flak position (not seen in action).
2. S/L. Source just off photo.
3. Isolated fire. Source not on photo.

LIST OF AIRCRAFT PLOTTED BY FIRES

A – attempted photograph with bombing.
B – “ without bombing.
C – No photograph attempted.

1. Aircraft previously plotted by ground detail, and recording fires over 3 miles from point of photography.

<table>
<thead>
<tr>
<th>NT. Ref.</th>
<th>A/C.</th>
<th>Gp</th>
<th>Plotted by G.D.</th>
<th>Fires recorded at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1502/17</td>
<td>N/57</td>
<td>3</td>
<td>1. N.W. SÜRTH, 4¾ m. 140° from City Centre</td>
<td>BICKENDORF. B.</td>
</tr>
<tr>
<td>/67</td>
<td>F/27</td>
<td>O.T.U.</td>
<td>1. RODENKIRCHEN. 3½ m. 135°</td>
<td>City A.</td>
</tr>
</tbody>
</table>

2. Aircraft not previously plotted, which passed over recognised groups of fires. Listed in approx.. time order.

<table>
<thead>
<tr>
<th>NT. Ref.</th>
<th>A/C.</th>
<th>Gp</th>
<th>Approx. Time</th>
<th>Fires recorded at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Time (hrs)</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U/101</td>
<td>0055</td>
<td>C. Centre of City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K/218</td>
<td>0055</td>
<td>A. BICKENDORF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P/218</td>
<td>0055</td>
<td>B. City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D/214</td>
<td>0056</td>
<td>A. N. City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T/115</td>
<td>0056</td>
<td>C. BICKENDORF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/9</td>
<td>0100</td>
<td>A. S. City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1174/18.</td>
<td>0100</td>
<td>A. NIPPES.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z/115</td>
<td>0100</td>
<td>A. MÜLHEIM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y/9</td>
<td>0102</td>
<td>A. City and across Rhine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G/101</td>
<td>0102</td>
<td>A. BICHENDORF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B/218</td>
<td>0103</td>
<td>C. RODENKIRCHEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/9</td>
<td>0109</td>
<td>C. S. City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U/7</td>
<td>0115</td>
<td>A. N. City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/15</td>
<td>0120</td>
<td>A. N. City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F/115</td>
<td>0125</td>
<td>A. River bank opposite City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DO/12</td>
<td>0130</td>
<td>A. City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C/149</td>
<td>0130</td>
<td>B. City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G/23</td>
<td>0139</td>
<td>A. BICKENDORF to City.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X/115</td>
<td>0145</td>
<td>C. City, river banks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/97</td>
<td>0209</td>
<td>A. City, river banks.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DISTRIBUTION.**

<table>
<thead>
<tr>
<th>H.Q.B.C.</th>
<th>Reports</th>
<th>Prints &amp; Diagrams</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. in C.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>G/C Ops for S.A.S.O.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Intelligence</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P.I. Sub-Section</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>W/Cdr. Nav.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>W/Cdr. Photos.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Narrative Officer</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>O.R.S.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>U.S.A.S. (High Wycombe)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>(F/Lt. Doggiss)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>H.Q. Groups</td>
<td>1,3,4.5.91.92.</td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td>Code</td>
<td>Quantity</td>
</tr>
<tr>
<td>--------------------</td>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>Air Ministry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>War Room</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>D.D.A.T.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A.I.3.c.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D.D.B. Ops.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D.P.R.</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>A.D.I. Science</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>R.A.F. Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medmenham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.O.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.I.14.E</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>C.I.U.</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>ALS/LES/JF/SA.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECRET
Map of Night Bombing of Cologne 30/31 May 1942

KÖLN
30/31.5.42
E

TO ACCOMPANY REPORT N.26

Symbols:

- Stick of incendiaries showing approximate length and direction.
- Bombs dropped not related to incendiary release.
- Dynamite and fire ecliptac.
- Dummy bombs in action.

Transcribed Map to Report N.26 without MA Acq No 1148.
SPECIAL INTERPRETATION REPORT ON DEFENCES.

1. MOEHNETAL. Ref. 3406 (G.S.G.S. 4081, Sheet 83).

The defences visible in the immediate vicinity of MOEHNETAL include a twin boom in front of the dam extending from the North Shore almost to the South Shore. There is a 3-gun light Flak battery at Ref. 345072 with six huts and a possible emplacement for a small searchlight nearby. Two buildings on the dam may each have a light flak gun on the roof.

Running through the wood North of the dam a dark line, which may be a belt of wire, can be seen. Inside this and near the North end of the dam is a small platform 27ft. x 15ft. with an object on it. South of the dam, where the wood is more dense, no wire is visible and a similar platform near this end of the dam is empty (Photo 5149).

A mound which has the appearance of a casemate but which is probably non-military is at 358068. It does not appear to be frequented. (Photo 5150).

2. NEHEIM/RACHUM. Ref. 2677038

There are two large huts and one small hut beside the road, at 267038. No flak defences are near this camp but it may be of a military nature. (Photo 5137).

3. SOEST/BUECKE. Ammunition Dump and Training Area.

There is an Ammunition Dump of ten medium sized stacks and ten very small stacks in a small wood at 385101 near a group of rifle ranges. The nearby area contains trenches and shell craters. Numerous horse exercise rings were visible in the training area in 1941, but have since disappeared and the area does not now appear to be very widely used (Photo 5083).

4. DECOYS.

There is a decoy at 266093, SOEST I (BREMEN) (Photo 5200), and 225103, SOEST 2 (SCHLUCKINGEN) (Photo 5206).

5. Although not covered by this Sortie the location of barracks at SOEST and ARNSBERG are given below:-

<table>
<thead>
<tr>
<th>Location</th>
<th>Reference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOEST</td>
<td>371145</td>
<td>P/W Camp in barracks surrounded by wire and watch towers.</td>
</tr>
<tr>
<td></td>
<td>387143</td>
<td>Large Barracks.</td>
</tr>
<tr>
<td></td>
<td>386136</td>
<td>Barracks.</td>
</tr>
<tr>
<td></td>
<td>397142</td>
<td>Storage and Military Depots.</td>
</tr>
<tr>
<td>ARNSBERG</td>
<td>359942</td>
<td>Barracks.</td>
</tr>
</tbody>
</table>
21.2.43.
R.A.F. Station, Medmenham
EWE/PD

339976 Barracks.
MEMORANDUM

From: Headquarters, Bomber Command

To: Senior Air Staff Officer,
    Headquarters, No. 5 Group.

Date: 9th May, 1943.

Ref: BC/S.26564/Int.

MOST SECRET

A question has been raised on the models which are held in your Group and the intelligence information available to accompany them. In order to clarify the situation and to keep your records up to date, certain material has been prepared and is sent to you herewith.

2. Further illustrations and information on the one for which only a target map is sent are in course of preparation and will be forwarded in the next two or three days.

3. The target material is forwarded in the following quantities:
   (i) 40 Target Maps and 20 copies of information sheet and each of 7 illustrations.
   (ii) 40 Target Maps and 20 copies of information sheet and each of 11 illustrations.
   (iii) 40 Target maps.

4. On the matter of defences the following is an extract from C.I.U. Report No. D/240A. The numbers contained in brackets in this extract refer to the C.I.U. plan which accompanied the report of which you have a copy:

"Defences.
(a) The towers (4) and (4a) have each had a very pointed tent-shaped roof according to pre-war pictures. The present photograph shows the points have been dismantled and removed so as to leave a platform measuring about 20 by 15 feet.

The parapet protecting both sides of the road leading over the crown of the dam appears to have been continued so as to form a further enclosure on the platform (3a).

These three platforms (3a), (4) & (4a) are seen to contain an object which may, in each case be a light A.A. gun."
(b) A light 3-gun A.A. position (12) is situated N. of the compensating basin. Each gun position occupies a slightly raised square measuring about 18 by 18 feet surrounded by a wall of sandbags or similar.

(c) A possible searchlight position is at (14).

(d) A double line boom with timber spreaders is floating on the main reservoir at 100 by 300 feet distance from the barrage. The boom appears to be anchored on the N. shore of the reservoir and is fairly tidy at its Northern end. The Southern end is not visibly connected to the shore and generally appears less tidy and well kept. Some of the spreaders are missing. The distance between the two lines varies from 20 to 10 feet.

An object – probably a buoy – is visible about 200 feet upstream of the centre of the dam. In view of the fact that the Western end of the boom is not connected to the shore, this buoy may be part of its anchorage.

(e) A dark straight line is seen leading from the Eastern end of the dam to a point marked (15) on the plan. Interpretation of this has not been possible. The surrounding trees appear undisturbed. The line may represent a drainage channel or else be a belt of wire.

(f) No other A.A. position or defence installation has been seen on other photos covering the region on Sortie D/68. *

5. Defences on the other two will be sent to you as soon as P.R.U. sorties have been flown which enable an estimate to be made.

6. It is understood you require certain measurements between towers. The most accurate measurement can be obtained from the model which you already hold. It is regretted that no accurate information exists in the other target but as soon as photographs are obtained this will be forwarded to you.

Group Captain
Chief Intelligence Officer
BOMBER COMMAND
1. INTRODUCTION

This report on the MOEHNE VALLEY BARRAGE deals with changes seen since reports D/240 A and D/244 A have been issued.

2. MOEHNE VALLEY BARRAGE

The barrage with the Main power station, the compensating basin and the auxiliary power station are seen on one print. No stereo cover is available.

(i) No significant change appears to have taken place since 19.2.43.

(ii) The water level upstream of the dam has not changed materially, but may be 1-2 feet higher.

(iii) The water level in the compensating basin appears to be the same as on 19.2.43.

3. DEFENCES.

(i) The double line boom which had a rather untidy appearance when last seen, appears to have been put in order. There are still a few spreaders missing, but the boom is tidy and stretched tight. Whilst the Southern end is still not visibly connected to the shore, it appears anchored and held in position.

The 2 objects Nos. 15 and 16 on C.I.U. plan D.226 (issued with report D/240 A) are now seen to be distancing bridges which hold the boom at approximately 85 to 110 feet distance from the dam along its whole length.
(ii) There is a three gun light flak battery at 354072. This appeared to be occupied on 19.2.43. and on 4.4.42 and was unchanged on the latter date.

(iii) Each of the two buildings on the dam appeared on the above dates as having a light flak gun on its roof. The object on the platform near the North end of the dam, reported in report No. D/240 A, of 27.2.43. is thought to be a probable light flak gun.

(iv) There are no further defences or military areas in ARNSBERG or SOEST districts to be reported other than those mentioned in MDM/MS 6/93, R.A.F Medmenham to A.D.I.Ph. of 21.2.43.

DISTRIBUTION.

D.B. Ops – Air Ministry
Air Commodore Bufton
3

MOST SECRET
R.A.F. STATION,
MEDMENHAM.

D.A.S./J.M.F./B.
IMMEDIATE INTERPRETATION REPORT NO. K.1559
(subject to correction and amplification from a more detailed assessment).

Photographs taken by 542 Squadron on 17.5.43

<table>
<thead>
<tr>
<th>SORTIES</th>
<th>Mean time of Photography</th>
<th>Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/578</td>
<td>0900 hrs.</td>
<td>1/9,800</td>
</tr>
<tr>
<td>D/581</td>
<td>1045 hrs.</td>
<td>1/10.300</td>
</tr>
<tr>
<td>D/585</td>
<td>1630 hrs</td>
<td>1/9,800</td>
</tr>
</tbody>
</table>

LOCALITY: THE MOEHNE, SORPE and EDER DAMS

COVER AND QUALITY.

On Sortie D/578 the MOEHNE VALLEY BARRAGE, the greater part of the Storage Lake and parts of the RUHR Valle as far as 20 miles downstream are covered on prints of a large scale and excellent quality. The N. end of the SORPE Lake with the dam and Compensating Basin is also covered. The Sortie does not cover the EDER DAM but portions of the lake, the BRINGHAUSEN STORAGE POWER STATION, the AFFOLDERN FLOW POWER STATION and the flooded parts of the country for about 6 miles downstream are covered.

On Sortie D/581 the upper part of the MOEHNE Storage Lake, part of the Main Lake and flooded areas 16 miles downstream from the EDER DAM are covered on photographs of good scale and excellent quality. The EDER DAM is not covered.

On Sortie D/585 about 2 miles of the EDER Valley near AFFOLDERN are covered on the photographs of large scale and good quality. The EDER DAM is not covered.

PERIOD UNDER REVIEW

These photographs were taken after the attack by aircraft of Bomber Command on the night of 16/17.5.43. No previous report on damage in this area has been issued.

PROVISIONAL STATEMENT OF DAMAGE

Two of the dams are known to have been breached and the other damaged. Water is seen pouring through a great gap in the MOEHNE dam and widespread damage has been caused by the rush of water down the valley. Two villages are seen flooded, bridges swept away, power stations and water works isolated and railway communications disrupted.
Although the EDER dam is not covered on these photographs there is evidence of damage caused by floods on a similar scale and over an even wider area than in the MOEHNE Valley.

The SORPE dam appears but slightly damaged.

A. THE DAMS.

(i) THE MOEHNE VALLEY BARRAGE

The dam is breached in the centre between the two valve houses. The breach at the crown of the dam measures about 230 feet, narrowing to about 130 feet at its base. Water is seen pouring through the gap into the Compensating Basin. Although the main pressure of the water at the time of photography has subsided the water is still flowing through gap solid.

SECRET
Page 2

The main Power Station at the foot of the dam has completely disappeared and must have been carried away by the first rush of water and masonry.

The water is seen rushing through the Compensating Basin and the northern embankment has been completely destroyed. The southern embankment is seen broken in several places, but the auxiliary Power Station remains standing.

The upstream lake is seen to be partly drained at the dam at 0900 hours (D/578/5109) and completely drained W. of the STOCKUM embankment and sluice gate at 1045 hours. Water is still seen, however, E. of this embankment. (D/581/5070).

(ii) THE SORPE DAM

The dam has been damaged in the centre. The parapet on the upstream side of the road across the dam has been broken for a length of 200 feet. The downstream parapet is also damaged and water has run down to the Compensating Basin, either as a result of a splash or through seepage.

At the E. end of the damage to the crown is a raised object about 40 feet in length and 25 feet wide blocking the road at a point where the seepage is most evident. The road is discoloured 200 feet each side of the damaged area. The level of the water in the lake appears unchanged.
The Power Station is not working at the time of photography but water appears to be running into the Compensating Basin through the by-pass tunnel. (D/578/5137).

(iii) THE EDER DAM

The dam itself is not covered on these Sorties but the floods seen downstream and the partly drained lake upstream indicate beyond doubt that the dam has been breached.

B. FLOOD DAMAGE

(i) THE MOEHNE VALLEY

In the neighbourhood of the dam part of the village of GUENNE has been completely swept away. (D/578 print 5109).

Between the dam and NEHEIM the water appears to be more confined but in the flatter part of the RUHR Valley W. of WICKEDE floods have spread over a wide area and a number of farm buildings have been isolated. The whole village of WESTICK and the village of DELLWIG are flooded. (D/578 prints 5048 and 5034)

At FROENDENBERG the damage is particularly severe. The embankments of the Canal are mostly destroyed and the Power Station isolated. The Railway bridge and the road bridge have been swept away and broken parts are seen downstream. The Railway Station and Sidings are inundated and several passenger coaches have been swept off the tracks. A small factor is partly under water. (D/578 print 5045).

At LANGSCHEDE the bridge is partly submerged and the water works completely flooded. (D/578 print 5040)

Between NEHEIM – FROENDERBERG and NEHEIM – NIEDERENSE the railway is in parts submerged and in parts washed away. (D/578 prints 5074-5068).

Floods are seen spreading towards BOESPERDE up the valley of the small river HOENNE. (D/578 print 5045).

(ii) THE EDER VALLEY.

At 0900 hours the generator house, the switch park and transformer enclosures of the BRINGHAUSEN Storage Power Station
were seen to be flooded (D/578/5162). At 1630 hours most of the water had drained away but the switch and transformer park showed silting up and a portion of the N. part washed away. (D/585/5028).

The embankment forming the N. edge of the Compensating Basin between HENFURTH and AFFOLDERN at 0900 hours was seen destroyed at several points and the whole valley under water. (D/578/5162).

The village of AFFOLDERN was partly submerged. The Power Station was flooded and the embankment destroyed. (D/578/5219). At 1630 hours many houses in the village were seen to have been demolished and the approaches to the bridge washed away. (D/585/5015).

The whole area between WABERN and FELSBERG, about 16 miles downstream from the EDER dam is seen to be completely under water. The railway Station and Sidings at WABERN are flooded and the embankment broken away. Isolated farm houses and hamlets appear above the water but railways, roads and bridges have been completely submerged. (D/581/5032-42).

The floods are seen to have spread southwards as far as UTTERSHAUSEN.

References to annotations on prints distributed.

(i) AFFOLDERN  (D/578/5219. Neg. No. 24690)
A. Village of Affoldern partly submerged.
B. Power Plant.
C. Water spreading S. of main road.

(ii) RUHR VALLEY at FROENDENBERG/BOESPERDE  
(D/578/5044. Neg. No. 24688)
1. Submerged road.
2. Isolated Electricity Works.
3. Destroyed road bridge.
4. Railway bridge destroyed.
5. Wrecked railway coaches.

Other prints distributed.

(iii) MOEHNE DAM (Before attack)  (D/366/5078). Neg. No. 24685.
(iv) MOEHNE DAM (After attack)  (D/578/5109). Neg. No. 24686.
(v) MOEHNE DAM (After attack)  (D/578/5108). Stereo pair.
(vi) EDER DAM (Before attack)  (D/517/5145). Neg. No. 24687.
(vii) SORPE DAM (After attack)  (D/578/5137). Neg. No. 24589.
SECRET.

R.A.F. STATION,
MEDMENHAM.

RAG ) ESK/G.
D’A-S )

DISTRIBUTION NO. 23.

+ A.D.I. (Ph)  7
+ S. of S.  1

E:    246
I:    24
N:     8

278
Appendix 3

Normandy - Transcribed Photographic Interpretation Reports

This appendix contains transcriptions of four Medmenham reports referenced in Chapter 5 which are listed in the table below. They are formatted as close as possible to the original photographic interpretation reports. However, they were typed on a larger format paper so page breaks that occur out of alignment with the A4 page are shown by a line of full stops running across the page.

<table>
<thead>
<tr>
<th>No</th>
<th>ACIU Report No</th>
<th>Locality</th>
<th>Date of Photographs</th>
<th>Date of Report</th>
<th>Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IS 1093</td>
<td>France, Denmark, Germany</td>
<td>Multiple</td>
<td>25 June</td>
<td>Air 29/336</td>
</tr>
<tr>
<td>2</td>
<td>DAR 745</td>
<td>Germany, France</td>
<td>28 June</td>
<td>28 June</td>
<td>Air 29/337</td>
</tr>
<tr>
<td>3</td>
<td>B 920</td>
<td>Denmark, France</td>
<td>15-24 June</td>
<td>28 June</td>
<td>Air 29/337</td>
</tr>
<tr>
<td>4</td>
<td>DRR 45</td>
<td>France</td>
<td>30 June /01 July</td>
<td>01 July</td>
<td>Air 29/338</td>
</tr>
</tbody>
</table>
A resume of Information received up to 23.59 hrs. on 24.6.44.

(NOT TO BE COPIED IN WHOLE NOR IN PART. THE CONTENTS ARE STRICTLY CONFINED TO THE SECTIONS ON THE DISTRIBUTION LIST.)

1. **SORTIES DESPATCHED**: (Objectives, claimed by pilot, or Form White (F.W.).)

   (i) **P.R.U.**

<table>
<thead>
<tr>
<th>Sorties No.</th>
<th>Objectives</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>106G/1061</td>
<td>14&quot; &amp; 36&quot;</td>
<td>SCHLESWIGLAND A/F, COPENHAGEN, ESBJERG (F.W.), W. Coast of JUTLAND, BRONS, EGGBEBEX A/F.</td>
</tr>
<tr>
<td>/1062</td>
<td>U/S, cloud.</td>
<td></td>
</tr>
<tr>
<td>/1063</td>
<td>6&quot; &amp; 36&quot;</td>
<td>A/Fs SALTZWEDEL, LUDWIGLUST, PERLEBEZIG, BELMENHORST, VAREL, BOCKHORN (F.W.), TONNING area. HAMBURG area, CELLE area, DELMENHORST, PUTLOS.</td>
</tr>
<tr>
<td>/1064</td>
<td>14&quot; &amp; 36&quot;</td>
<td>MAGDEBURG/OST A/F (F.W.), MAGDEBURG, F/A/F4, BERNBURG, AHLORN A/F.</td>
</tr>
<tr>
<td>/1065</td>
<td>U/S, cloud.</td>
<td></td>
</tr>
<tr>
<td>/1066</td>
<td>U/S, cloud.</td>
<td></td>
</tr>
<tr>
<td>/1067</td>
<td>36&quot;</td>
<td>LAVAL A/F, LIMOGES, SAINTES M/Yd. (F.W.), NORMANDY BEACHES.</td>
</tr>
<tr>
<td>/1068</td>
<td>U/S, cloud.</td>
<td></td>
</tr>
<tr>
<td>/1069</td>
<td>U/S, cloud.</td>
<td></td>
</tr>
<tr>
<td>/1070</td>
<td>36&quot;</td>
<td>LISIEUX area.</td>
</tr>
<tr>
<td>/1071</td>
<td>14&quot; &amp; 36&quot;</td>
<td>PONTCHATEAU – NANTES – LA ROCHE, ANGERS – SABLES - NANTES</td>
</tr>
<tr>
<td>/1073</td>
<td>14&quot; &amp; 36&quot;</td>
<td>VITRY and area.</td>
</tr>
<tr>
<td>/1075</td>
<td>36&quot;</td>
<td>DIEPPE, ROUEN, (F.W.), FECAMP, S. of NEUCHATEL, DIEPPE – ROUEN area.</td>
</tr>
<tr>
<td>/1076</td>
<td>14&quot; &amp; 36&quot;</td>
<td>NIMES – AVIGNON, TOULOUSE – CAUSSADE.</td>
</tr>
<tr>
<td>/1077</td>
<td>14&quot; &amp; 36&quot;</td>
<td>LIMOGES, SAINTES, CHATEAUDUN A/F, (D/A), GENEVA area, ROMANS-SUR-ISERE, FECAMP, MEXIMEUX, ST. PIERRE DU FRESNE, area N. of PORT-EN-BESSIN, A/Fs CRAVANT, ST.YAN, VALENCE, MONTELEMAR/ANCONE, ORANGE/PLAN DE DIEU, -/CARITAT, AVIGNON/CHATEAUBLANC,-/PUJAUT, LE VALLON, COGNAC/CHATEAU BERNARD, ANGERS/AVRILLE, LAVAL.</td>
</tr>
<tr>
<td>/1078</td>
<td>36&quot;</td>
<td>BOULOGNE (F.W.), CALAIS, LE TOUQUET and areas.</td>
</tr>
<tr>
<td>/1079</td>
<td>36&quot;</td>
<td>CALAIS (F.W.), GRAVELINES – ST. INGLEVERT, MARQUISE/MIMOYEQUES.</td>
</tr>
<tr>
<td>/1080</td>
<td>36&quot;</td>
<td>LIMOGES, SAINTES (D/A), ST. JEAN DE LUZ, BAYONNE A/Fs. PERPIGNAN, OSSUN, PAU PONT LONG, BIARRITZ.</td>
</tr>
<tr>
<td>/1081</td>
<td>14&quot; &amp; 36&quot;</td>
<td>MONTPELLIER – TOULOUSE.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>/1082</td>
<td>36&quot;</td>
<td>DIEPPE and area. NEUFCHATEL area, LISIEUX.</td>
</tr>
<tr>
<td>/1083</td>
<td></td>
<td>Cancelled</td>
</tr>
<tr>
<td>/1084</td>
<td>6&quot; &amp; 36&quot;</td>
<td>VITRY-LE-FRANCOIS – LUNEVILLE.</td>
</tr>
<tr>
<td>/1085</td>
<td>36&quot;</td>
<td>L’HEY, BIENQUES, COURRONNE (D/A), BOULOGNE and area, CALAIS and area, DUNKIRK, YPRES area, CASSEL AREA, GUINES area.</td>
</tr>
<tr>
<td>/1086</td>
<td>36&quot;</td>
<td>ST. POL – FREVENT – OISEMONT areas.</td>
</tr>
<tr>
<td>/1087</td>
<td>36&quot;</td>
<td>ST. VALERY – BUCHY, AUUFFAY, CLERS.</td>
</tr>
<tr>
<td>/1088</td>
<td>36&quot;</td>
<td>CAYEUX – AMIENS area.</td>
</tr>
<tr>
<td>/1089</td>
<td>36&quot;</td>
<td>FECAMP – ROUEN area.</td>
</tr>
<tr>
<td>/1090</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1091</td>
<td>36&quot;</td>
<td>LE HAVRE – QUILLEBEUF - ETRETAT area.</td>
</tr>
<tr>
<td>/1092</td>
<td>36&quot;</td>
<td>TOCQUEVILLE – ST. THIRAULD area.</td>
</tr>
</tbody>
</table>

---------------------------

(i)  P.R.U. (Cont’d)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>106G/1093</td>
<td>36&quot;</td>
<td>AULT – POIX area</td>
</tr>
<tr>
<td>/1094</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1095</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1096</td>
<td>36&quot;</td>
<td>ETRETAT – SOTTEVILLE area</td>
</tr>
<tr>
<td>/1097</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1098</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1099</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1100</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1101</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1102</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/1103</td>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>/K.112</td>
<td>20&quot;</td>
<td>LA PALLICE, ROYAN, LE VERDON, BLAYE, PAUILLAC, BORDEAUX, LANNION, BORDEAUX/MERIGNAC A/F.</td>
</tr>
</tbody>
</table>

(ii)  U.S.A. 7th PHOTO GROUP

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US/7GR/2072</td>
<td>6&quot; &amp; 24&quot;</td>
<td>BREMEN, OLDENBERG area, OBISFEDE area, VERDEL – LANGWEDEL area.</td>
</tr>
<tr>
<td>/2073</td>
<td></td>
<td>U/S, cloud</td>
</tr>
<tr>
<td>/2074</td>
<td>6&quot; &amp; 24&quot;</td>
<td>A/Fs CHATEAUDUN, ORLEANS/BRICY. Bridges SAUMUR, TOURS LA RICHE (D/A), ST MALO.</td>
</tr>
<tr>
<td>/2075</td>
<td>6&quot; &amp; 24&quot;</td>
<td>BOURGES A/F (F.W.), CHAVANNES/COUDRON L/G.</td>
</tr>
<tr>
<td>/2076</td>
<td></td>
<td>U/S, weather</td>
</tr>
<tr>
<td>/2077</td>
<td>36&quot;</td>
<td>ROMILLY-SUR-SEINE A/F (F.W.), DIEPPE</td>
</tr>
<tr>
<td>/2078</td>
<td>36&quot;</td>
<td>2 unidentified Landing Strips S.E. OF PARIS and W. of SEINE</td>
</tr>
<tr>
<td>/2079</td>
<td></td>
<td>No details.</td>
</tr>
<tr>
<td>/2080</td>
<td></td>
<td>No details.</td>
</tr>
<tr>
<td>/2081</td>
<td></td>
<td>No details.</td>
</tr>
<tr>
<td>/2082</td>
<td></td>
<td>U/S.</td>
</tr>
<tr>
<td>/2083</td>
<td></td>
<td>U/S.</td>
</tr>
<tr>
<td>/2084</td>
<td></td>
<td>U/S.</td>
</tr>
<tr>
<td>/2085</td>
<td></td>
<td>No details.</td>
</tr>
<tr>
<td>/2086</td>
<td></td>
<td>No details.</td>
</tr>
<tr>
<td>/2087</td>
<td></td>
<td>No details.</td>
</tr>
</tbody>
</table>

---------------------------
(iii) U.S.A. 10th PHOTO GROUP

| US/33/906 | 24” | ARGENTAN |
| 31/907 | 24” | U/S, cloud |
| 34/908 | 24” | FORET DE CONCHES (F.W. – D/A). |
| 909 | 24” | U/S, cloud |
| 31/910 | 24” | Strips OCTEVILLE, EQUERDREVILLE, TOURLAVILLE, MARIGNY, S. CHERBOURG. |
| 33/911 | 40” | SENONCHES |
| 912 | 24” | ST BRIEUC/LA PLAINE A/F. (F.W.). |
| 31/913 | 40” | FORET D’ANAINE, BAGNOLES DE L’ORNE. |
| 914 | 24” | GATTEVILLE (Coastal Battery). |

INFORMATION SUMMARY No. 1093 (Cont’d)

(iii) U.S.A. 10th PHOTO GROUP (Cont’d)

| US/33/915 | Escort - no photos. |
| 31/916 | U/S, cloud |
| /917 | 24” | FORET DE GRIMBOSQ, ST. LAURENT DE CONDDE, VIEUX, (BRETTEVILLE-SUR-LAIZE area, Chateau at BARON. |
| /918 | U/S, cloud |
| /919 | 36” | A/Fs RENNES/ST. JACQUES, GAEL, VANNES/MEUCON. |
| /920 | No details |
| /921 | No details |
| 34/922 | 24” | Strip AURAY River, BELLEILE, HOUIT ILE, HOEDIC ILE, strip N. from QUIBERON Peninsula |
| /923 | 24” | Strip of coast LORIENT – ST. NAZAIRE. |
| /924 | 24” | Area W. of ST. NAZAIRE, E. of LOUDEAC. |
| /925 | U/S. |
| /926 | 24” | VANNES area. |
| /927 | 24” | Area W. of ST. NAZAIRE. |
| /928 | 24” | QUIBERON Peninsula area. |
| /929 | 36” | KERLIN/BAST RD area |
| /930 | 24” | QUIBERON Peninsula area. |
| /931 | U/S. |
ST. NAZAIRE area.

ARGENTAN Escort – no photos.

CHARTRES/GASVILLE, LA LOUPE, SENOCHES.

Visual

(Task 373 etc., no details).

Visual

(Task 373 etc., no details).

No details.

(Task 373 etc., no details).

U/S.

(U/S, cloud)

GATTEVILLE, OCTEVILLE, LE MOULAY, ST. PIERRE, CAMBREMER.

No details.

No details.

GALLARDON Junction, CHARTRES Bridge.

No details.

Photos, - no details

<table>
<thead>
<tr>
<th>31/932</th>
<th>24”</th>
<th>ST. NAZAIRE area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>33/934</td>
<td>24”</td>
<td>ARGENTAN Escort – no photos.</td>
</tr>
<tr>
<td>935</td>
<td></td>
<td>CHARTRES/GASVILLE, LA LOUPE, SENOCHES.</td>
</tr>
<tr>
<td>936</td>
<td>36”</td>
<td>Visual</td>
</tr>
<tr>
<td>937</td>
<td></td>
<td>(Task 373 etc., no details).</td>
</tr>
<tr>
<td>938</td>
<td>24”</td>
<td>(Task 373 etc., no details).</td>
</tr>
<tr>
<td>939</td>
<td>24”</td>
<td>(Task 373 etc., no details).</td>
</tr>
<tr>
<td>940</td>
<td>24”</td>
<td>No details.</td>
</tr>
<tr>
<td>941</td>
<td>24”</td>
<td>(Task 373 etc., no details).</td>
</tr>
<tr>
<td>942</td>
<td>24”</td>
<td>U/S.</td>
</tr>
<tr>
<td>943</td>
<td>24”</td>
<td>(Job 782&quot;, no details).</td>
</tr>
<tr>
<td>944</td>
<td></td>
<td>(Task 373 etc., no details).</td>
</tr>
<tr>
<td>945</td>
<td>24”</td>
<td>GATTEVILLE, OCTEVILLE, LE MOULAY, ST. PIERRE, CAMBREMER.</td>
</tr>
<tr>
<td>946</td>
<td>36”</td>
<td>No details.</td>
</tr>
<tr>
<td>947</td>
<td>20”</td>
<td>No details.</td>
</tr>
<tr>
<td>948</td>
<td>34”</td>
<td>GALLARDON Junction, CHARTRES Bridge.</td>
</tr>
<tr>
<td>949</td>
<td>36”</td>
<td>Visual</td>
</tr>
<tr>
<td>950</td>
<td>20”</td>
<td>GALLARDON Junction, CHARTRES Bridge.</td>
</tr>
</tbody>
</table>

(iv) 34 - WING

<table>
<thead>
<tr>
<th>16/535</th>
<th>U/S, cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>536</td>
<td>36” FLERS, DOMFRONT Rly. Centres, A/Fs., BEAUMONT/LE ROGER, FLERS/ST. PAUL (F.W.), QUIEVILLE, LA FERTE MACE, CHERBOURG.</td>
</tr>
<tr>
<td>537</td>
<td>20” EVREUX, LA LOUPE. SERVIGNY, NOGENT, THI[illegible text], MORTAGNE, CONCHES A/F.</td>
</tr>
<tr>
<td>538</td>
<td>20” CONCHES A/F.</td>
</tr>
<tr>
<td>539</td>
<td>U/S, cloud</td>
</tr>
<tr>
<td>540</td>
<td>20” A/Fs. ERE, BRIOLLAY, COURNEN.</td>
</tr>
<tr>
<td>541</td>
<td>20” OUISTREHAM beaches, COURSEULLES ([illegible text]), POINTE DE LA PERCHE, -/DE GRAND VEE.</td>
</tr>
<tr>
<td>543</td>
<td>20” CHARTRES – ABIS – LA LOUPE, PONT L’EVEQUE – LE HAVRE</td>
</tr>
<tr>
<td>544</td>
<td>20” CHARTRES, [illegible text], CHATEAUDUN.</td>
</tr>
</tbody>
</table>

(iv) 34 – WING (Cont’d)

<table>
<thead>
<tr>
<th>16/545</th>
<th>36” DOUVRES, CREPON, CREUILLY, ST. LEGER, MANVIEUX.</th>
</tr>
</thead>
<tbody>
<tr>
<td>546</td>
<td>36” ST. QUENTIN, MONTDIDIER, ABBEVILLE, AMIENS.</td>
</tr>
<tr>
<td>547</td>
<td>20” DINARD/PLEURTUIT A/F.</td>
</tr>
<tr>
<td>548</td>
<td>U/S, cloud</td>
</tr>
</tbody>
</table>

SECRET

Page 4.
U/S, cloud

R THEL Rly.

CHATEAUDUN, VENDOME, TOURS, LA FLECHE, LAVAL, ST. HILAIRE.

ORLEANS – LE MANS – LA FLECHE Roads, LE MANS A/F.

TORRAN – MAYENNE area.

2. ADDITIONS TO PARA. 1 OF PREVIOUS SUMMARIES

3. MISCELLANEOUS SORTIE PRINTS RECEIVED

| MV.2966/TAIN/86 | (16.6) 6½” | Swedish Tanker URANUS. Swedish M.Vs SAGOLAND and VASALAND. |
| MV.2967/SE/547 | 6½” | French Fishing Vessel |
| MV.2968/SE/206 | (8.6) 6½” | French Tunneyman. |
| N.807/SE/53 | (17.6) 6½” | Allied Frigate |
| N.808/STD/502 | (15.6) 6½” | Allied Frigate |
| N.809/TAIN/86 | (11.6) 6½” | H.M. Cruiser, LONDON and NEWCASTLE class. |
| Combat Films | (21.6) Nos: | 2460, 2461, 2469, 2470, 2473, 2474, 2479, 2482-2488, 2490-2493 T.A.F. |
| | (21.6) | 2494-2496, 2499, 2500, 2502-2504, 2508-2515 T.A.F. |
| | (21.6) | 5494-5498, 5504, 5507, 5508, 5512-5524, 5529-5540, 5542-5545 A.D.G.B. |
| | (21.6) | 5546-5552, 5555-5561, 5564, 5566-5570, 5572, 5574, 5580-5586, 5589, 5595, 5601-5610, 5613-5615. |

4. REPORTS ISSUED

6461 ARACHON, BELLE ISLE, LOCHTUDY, CAMRET, CHATEAULIN RIVER, LE CONQUET (Shipping), BAYONNE, GIRONDE, BENODET, ODET RIVER, DOUARNENEZ (Booms, Shipping), BORDEAUX, LA PALLICE, LORIENT, BREST (Balloons, Booms, Shipping).

6462 BOULOGNE, DIEPPE, LE HAVRE, CHERBOURG, ALDERNAY, GUERNSEY, ST. MALO, (Booms, Shipping), ROUEN, MORLAIX (Shipping).

6463 SCHIERMONNIKOOG (Balloons, Shipping), LIMUIDEN, AMSTERDAM (Booms, Shipping), DAN HEIDER (Balloons, Booms, Shipping).

6464 KIEL (Booms, Shipping), BRETHOLZ (Shipping).

A.352 Movements of Enemy controlled Tankers May 20th to June 20th 1944.


DRR. 37 Daily Railway Report.

D.186(R) PLOESTI (Oil Refinery)

G.18(R) BUDAPEST (Broadcasting Stations).

K.2544 ILLIERS/L.EVEQUE A/F. (D/A)

K.2545 HEUZELAIS Junction

K.2546 CAZAUX A/F.

K.2547 ROUEN Storage Tank (4 miles S.W.) and Supplement
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.2548</td>
<td>GUYANCOURT/CAUDON A/F</td>
<td></td>
</tr>
<tr>
<td>K.2549</td>
<td>PARI Fuel Storage, Petrol Dumps, and ST. ONEN Docks</td>
<td></td>
</tr>
<tr>
<td>K.2550</td>
<td>LILLE M/Yd.</td>
<td></td>
</tr>
<tr>
<td>K.2551</td>
<td>LAON M/Yd.</td>
<td></td>
</tr>
<tr>
<td>K.2552</td>
<td>RHEIMS M/Yd.</td>
<td></td>
</tr>
<tr>
<td>KS.1095</td>
<td>GOTAH (Clearance and Reconstruction)</td>
<td></td>
</tr>
<tr>
<td>KS.1115</td>
<td>WATTEN</td>
<td></td>
</tr>
<tr>
<td>KS.1144</td>
<td>ENNY/ST. JULIEN</td>
<td></td>
</tr>
<tr>
<td>KS.1145</td>
<td>SIRACOURT</td>
<td></td>
</tr>
<tr>
<td>KS.1147</td>
<td>CREPIEUL</td>
<td></td>
</tr>
<tr>
<td>KS.1148</td>
<td>LE MEILLARD (Clearance and Reconstruction)</td>
<td></td>
</tr>
<tr>
<td>KS.1149</td>
<td>AGENVILLERS, BELLEVUE, BOIS DES HUIT RUES, BOIS REMFRE (Clearance and Reconstruction)</td>
<td></td>
</tr>
<tr>
<td>KS.1150</td>
<td>NUCOURT (Special Military Construction)</td>
<td>(D/A)</td>
</tr>
<tr>
<td>KS.1151</td>
<td>MARQUISE/MIMOYECQUES (Special Military Construction)</td>
<td></td>
</tr>
<tr>
<td>KS.1152</td>
<td>LAMBUS (Special Military Construction)</td>
<td></td>
</tr>
<tr>
<td>KS.1153</td>
<td>PREDEFIN (Special Military Construction)</td>
<td></td>
</tr>
<tr>
<td>KS.1154</td>
<td>REMAISNIL (Special Military Construction)</td>
<td></td>
</tr>
<tr>
<td>KS.1155</td>
<td>BLANGERMONT (Special Military Construction)</td>
<td></td>
</tr>
<tr>
<td>KS.1156</td>
<td>MONTLOUIS FERME (Special Military Construction)</td>
<td></td>
</tr>
<tr>
<td>KS.1157</td>
<td>BELLOYSUR-SOMME (Special Military Construction)</td>
<td>(D/A)</td>
</tr>
<tr>
<td>KS.1158</td>
<td>BOIS COQUEREL (Special Military Construction)</td>
<td></td>
</tr>
<tr>
<td>KS.1159</td>
<td>SAUMUR (Tunnel and Bridges)</td>
<td></td>
</tr>
<tr>
<td>KS.1160</td>
<td>CREPY</td>
<td></td>
</tr>
<tr>
<td>L.204</td>
<td>MARIENBURG (A/c Factory)</td>
<td></td>
</tr>
<tr>
<td>L.205</td>
<td>RRNO/KURIN (A/c Factory)</td>
<td></td>
</tr>
<tr>
<td>L.244</td>
<td>COTTBUS (Possible Aircraft Factory)</td>
<td></td>
</tr>
<tr>
<td>N.392</td>
<td>CAEN Bridges (12/13.6.44) (Plotting by Fires)</td>
<td></td>
</tr>
<tr>
<td>N.393</td>
<td>GELENKIRCHEN</td>
<td></td>
</tr>
<tr>
<td>N.394</td>
<td>LOUAI Rly. Junction. (14/15.6.44)</td>
<td></td>
</tr>
<tr>
<td>NS.453</td>
<td>CAEN Bridges (12/13.6.44) (Markers)</td>
<td></td>
</tr>
<tr>
<td>NS.455</td>
<td>DOUAI Rly. Junction (14/15.6.44)</td>
<td></td>
</tr>
<tr>
<td>NS.456</td>
<td>GELENKIRCHEN (12/13.6.44)</td>
<td></td>
</tr>
<tr>
<td>SA.2115</td>
<td>CREIL A/F (14.6.44) (Daylight attack)</td>
<td></td>
</tr>
<tr>
<td>SA.2136</td>
<td>BERLIN (21.6.44)</td>
<td></td>
</tr>
<tr>
<td>SA.2138</td>
<td>BEAUVOR/SAUTRECOURT (2.6.44)</td>
<td></td>
</tr>
<tr>
<td>SA.2139</td>
<td>WIZERNES, MARQUISE/MIMOYECQUES (22.6.44)</td>
<td></td>
</tr>
<tr>
<td>SA.2141</td>
<td>ETAMPES/MONDEISR A/F</td>
<td></td>
</tr>
<tr>
<td>SA.2142</td>
<td>GHENT/MARINE M/Yd.</td>
<td></td>
</tr>
<tr>
<td>SA.2143</td>
<td>GUYANCOURT A/F.</td>
<td></td>
</tr>
<tr>
<td>SA.2144</td>
<td>BUC A/F.</td>
<td></td>
</tr>
<tr>
<td>SA.2145</td>
<td>ST. CYR A/F.</td>
<td></td>
</tr>
<tr>
<td>SA.2146</td>
<td>LILLE</td>
<td></td>
</tr>
<tr>
<td>Z.126</td>
<td>ST. PEYRES DAM/LE VINTROU (Balloon Barrage).</td>
<td></td>
</tr>
</tbody>
</table>
5. REPORTS FROM A.E.A.F.

(a) 2\textsuperscript{nd} T.A.F.

Nil.

(b) 9\textsuperscript{th} U.S.A.A.F.

| US/10/G.24 | RENNES, CHALONNES-SUR-LOIRE, SAUMUR, VILLEDIEU-LES-POELES, MORLAIX A/F. |

6. POINTS OF INTEREST TO INTERPRETERS: Nil.

SECRET DISTRIBUTION No.31 25.6.44

A.C.I.U.
CCG/ME/C
DAILY AIRFIELD REPORT NO. DAR.745

From 0001 hrs. on 28.6.44 to 1600 on 28.6.44

NOTE: NIL signifies that no aircraft and no activity are seen
This report is not to be used for the purpose of amending
Air Ministry Publications.

(Page 1 covers Germany, and is not transcribed.)

Page 2.

FRANCE

1. ABBEYVILLE/DRUCAT
US7GR/2140 27.6.44 1300hrs. 1/12,500 (F.L.24") 25,000’ ‘A’ Photos. 3088, 3089

   (i) No aircraft are visible.

   (ii) The runways remain obstructed by detonated mine, craters and landing area
        by trenches and rough ploughing.

2. [illegible text]. Nil
106G/1137 27.6.44 1445 hrs. 1/9,000 (F.L.36") 27,000’ ‘A’ Photos. 4047, 4048

3. [illegible text] NES/LA PLACE. Nil
106G/1138 27/6/44 1935 hrs. 1/9,700 (F.L.36") 29,000’ ‘A’ Photos. 4126, 4127

4. MARQUISE. Nil
106G/1137 27.6.44 1445 hrs. 1/9,000 (F.L.36") 27,000’ ‘b’ Photos. 3001

5. MARQUISE/HIDREQUENT
106G/1137 27.6.44 1445 hrs. 1/9,000 (F.L.36") 27,000’ ‘A’ Photos. 3011, 3012

   (i) The E. part of the airfield is obscured by cloud shadow.

   (ii) No aircraft are visible on the part seen.

   (iii) The landing ground remains obstructed.

6. MONTELIMAR/ANCONE
106G/1129 25.6.44 1445 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’
     1/24,000 (F.L.14") Photos. 3056-58, 1037-39

   (i) Only the E. side of the airfield is covered on the large scale photographs. The
       14” prints cover all but the W. end of the S.W. dispersal.

   (ii) 4 Ju 88 are visible in the part seen.
7. NUNCQ
US7GR/2140  27.6.44  1300hrs.  1/12,500 (F.L.24")  25,000’  ‘A’ Photo.3835.
   (i) The S.E. part of the airfield is not covered.
   (ii) No aircraft are visible on the part seen.
   (iii) The runway remains obstructed by detonated mine craters and the landing area by trenches.

8. ST. DIZIER LANDING STRIP NO.3 (G.S.G.S  4042 Sheet 9)
106G/1120  25.6.44  1100 hrs.  1/9,300 (F.L.36")  23,000’  ‘A’ Photos. 3056-57
   (i) A new landing strip is covered for the first time at an approximate positions of 48° 38’ 10” N. 4° 43’ 0” E.
   (ii) The landing strip is approximately 700 yards long and 70 yards wide. It appears to be still under construction.

9. ST. INGLEVERT
106G/1138  27/6/44  1935 hrs.  1/9,700  (F.L.36")  29,000’  ‘A’ Photo. 4133
   (i) The North half of the Field is not covered.
   (ii) No aircraft are visible on the part seen.
   (iii) The airfield is still obstructed by trenches, bomb craters and detonated mines.

10. VALENCE/LA TRESORERIE
106G/1129  25.6.44  1445 hrs.  1/9,300 (F.L.36")  28,000’  ‘A’ Photos.4070
   (i) Only the extreme end of one dispersal area is covered.
   (ii) 1 Ju 88 is visible on the part seen.

11. YVRENCH
106G/1135  27.6.44  1050 hrs.  1/9,000 (F.L.36")  27,000’  ‘A’ Photos. 4071
   (i) The Northern part of the landing area is not covered.
   (ii) No aircraft are visible on the part seen.
   (iii) The runway remains obstructed by detonated mine craters and trenches and the landing strips by trenches.

CORRIGENDUM TO SUPPLEMENT DAR/740
GERMANY

LANDING GROUND NEAR WELSCHENBURG (106G/1013)

The co-ordinates for this landing ground should read as follows:

53° 28’ 34” N.
15° 44’ 11” E.

and not 52° 28’ 34” N. as stated previously.

CONFIDENTIAL

A.C.I.U.
/EW/A

DISTRIBUTION 12a

E = 46
I = 9
55
APPENDIX A TO DAR/745

2nd T.A.F. Daily Airfield Reports received at A.C.I.U during the previous 24 hours.

2nd T.A.F. IMMEDIATE INTERPRETATION REPORT TAF/B.R.50

NOTE: NIL Signifies no a/c and no activity seen.

1. BEAUMONT LE ROGER A/F (G.S.G.S. 4040a/46. Grid Ref. 958786)
   4/324 24 June 44. 0830B hrs. 1/16,800 (F.L.20") ‘A’ Prints 3005-09. 4005-09
   16/537 24 June 44. 0850B hrs. 1/18,000 (F.L.20") ‘A’ Prints 4108-4112, 3104-3105.
   (i) COVER
       The A/F is fully covered.
   (ii) AIRCRAFT
       No a/c visible.
   (iii) ACTIVITY
       The Eastern half of the landing area is serviceable. No attempt has been
       made to fill craters on the Western half of the landing area or to repair
       damaged buildings.

2. BRIOLLAY L/G (G.S.G.S. 4249/7 J. Grid Ref. 859904)
   16/540 24 June 44. 1315B hrs. 1/17,800 (F.L.20") ‘A’ Prints 3014-3017
   (i) COVER
       The landing ground is fully covered.
   (ii) AIRCRAFT
       23 small a/c are visible dispersed in hedgerows on the E. boundary.
   (iii) ACTIVITY
       The landing areas are fully serviceable. No activity apparent since 22 June
       44. (140/366).

3. BOUARD L/G (G.S.G.S. 4250/9H/2, Grid Ref. 477725)
   16/544 24 June 44. 1645B hrs. 1/18,000 (F.L.20” ‘A’ Prints 3010-3012 4010-4012
   (i) COVER
       The landing ground is fully covered.
(ii) AIRCRAFT
   No a/c visible.

(iii) ACTIVITY
   The landing area appears serviceable. Further clearances for a/c have
   been made in a small wood off the N.W. boundary of the landing area since 22
   June 44. (16/512)

4. CHATEAUDUN A/F (G.S.G.S. 4250/9H1. Grid Ref. 266604)
   16/512 22 June 44 1445B hrs. 1/18,000 (F.L.20") 'A' Prints 3079-3081 4097-
   4098

   (i) COVER
      The A/F is fully covered.

   (ii) AIRCRAFT
      4 a/c visible as follows:
      1 small in N.E. dispersal
      1 medium with markings similar to allied invasion markings in N.E.
      dispersal
      1 medium in S.W. corner
      1 medium in S.E. dispersal.

   ........................................................................................................

APPENDIX A TO DAR/745 (Cont)  CONFIDENTIAL
Page 2

(iii) ACTIVITY
      The SW/NE. runway is fully serviceable. The NW/SE. runway is nearing
      serviceability. Isolated craters are being filled. The landing area is
      unserviceable. Craters are visible on E. extremity of the landing strip limiting
      serviceability. No repairs have been affected to damaged facilities.

5. CONCHES A/F (G.S.G.S. 4040A/46. Grid Ref. 048595)
   16/537 24 June 44 0830B hrs. 1/18,000 (F.L.20") 'B' Prints 3142, 3143, 3148-
   3[illegible text], 4162-64

   16/538 24 June 44 0910B hrs. 1/18,000 (F.L.20") 'A' Prints 3004-3006, 3009-
   3012

   (i) COVER
      The A/F is fully covered.

   (ii) AIRCRAFT
      No a/c visible.

   (iii) ACTIVITY
      The landing area remains unserviceable except for a run E/W. of about
      1300 yards along the N. boundary as on 21 June 44. Grass cutting is on
progress in this area. No other signs of activity are apparent. Constructional work on both landing strips continues. Considerable track activity is seen adjacent to strip No.2 leading off S. to a small wood. From the E. end of the strip a long taxi track, in the initial stages of construction leads off to a small copse. At the E. extremity of strip 1 levelling and hedge clearance is in progress and taxi-tracks in the initial stage of construction lead NE. and SE. to small copses.

6. CORNE L/G (G.S.G.S. 4250/7HJ3. Grid Ref. 965764)
16/640 24 June 44 1315B hrs. 1/17,800 (F.L.20”) ‘A’ Prints 3029-31

(i) COVER
   The landing area is fully covered.

(ii) AIRCRAFT
   7 medium and 1 small a/c visible dispersed in hedge-rows on the S. boundary.

(iii) ACTIVITY
   The landing area is fully serviceable. No new activity visible since 22 Jun 44. (140/366).

7. DREUX/VERMOUILLET A/F (G.S.G.S. 4040A/46 NW. Grid Ref. 318313)
4/324 24 June 44 0830B hrs. 1/16,000 (F.L.20”) ‘A’ Prints 3010-3014, 4010-4014.

(i) COVER
   The A/F is fully covered.

(ii) AIRCRAFT
   2 probable small a/c in E. dispersal.

(iii) ACTIVITY
   The NW/SE runway remains temporarily obstructed by 3 small craters. The serviceability of the airfield is limited to a flight strip adjacent to the runway and an area in the extreme N. near the hangers where a run E/W. of 1000 yards is available. The NNE/SSW runway and remainder of the landing area are unserviceable.

(iv) DEFENCES
   Addition 6 gun heavy flak batteries are sited at Grid Ref. 351310 and 326278 (unemplaced). Additional 3 gun light Flak battery at Grid Ref. 329280.

8. [illegible text]/ST. PAUL L/G (G.S.G.S. 4250/7F/5. Grid Ref. 847209)
4/321 24 June 44 0830B hrs. 1/16,000 (F.L.20") ‘A’ Prints 3818-3821.

(i) COVER
   The L/G is fully covered.

(ii) AIRCRAFT
   No a/c visible.

(iii) ACTIVITY
   The eastern half of the landing area remains unserviceable. The western half of the landing area appears serviceable. Levelling and constructional activity continues off the W. of the airfield. The NNE/SSW runway and remainder of the landing area are unserviceable.

9. ILLIERS L’EVEQUE A/F (G.S.G.S. 4040A/47. Grid Ref. 232474)
   16/537 24 June 44 0850B hrs. 1/18,000 (F.L.20") ‘A’ Prints 3811, 3014.

   (i) COVER
       The A/F is fully covered.

   (ii) AIRCRAFT
       1 probable small a/c in small clump of trees in the new W. dispersal.

   (iii) ACTIVITY
       The serviceability of the A/F remains limited to a run of about 1000 yards long running NE/SW as on 21 June 44. 4/298). No signs of activity are apparent on the airfield. There are no significant changes in the new dispersal although extensive track activity is visible. The landing strips show no change.

10. LAVAL L/G (G.S.G.S. 4040B SW.76 SE. Grid Ref. 705415)
    140/366 22 June 44 1405B hrs. 1/18,000 (F.L.20") ‘A’ Prints 3224-7, 4215-8.
    140/373 23 June 44 0920B hrs. 1/17,400 (F.L.20") ‘A’ Prints 3109-11, 4189-12.

   (i) COVER
       The A/F is fully covered.

   (ii) AIRCRAFT
       No a/c visible.

   (iii) ACTIVITY
       The landing ground is unserviceable. Several craters near the NW. perimeter have been filled. No additional reconstruction activity is seen.

11. NONANCOURT/ MERVILLE LANDING STRIP (G.S.G.S. 4040A/47 S[illegible text]. Grid Ref. 234436)
    16/537 24 June 44 0850B hrs. 1/18,000 (F.L.20") ‘A’ Prints 3015, 3016.

   (i) COVER
       The landing strip is fully covered.
(ii) AIRCRAFT
3 probable small a/c dispersed at edge of a copse at SW. extremity of strip.
1 medium crashed off NE. extremity.

(iii) ACTIVITY
There is no apparent change in the landing strip apart from grass cutting since 20 June 44. (4/287).

12. ST. ANDRE/LE FAVRILLEDU[illegible text]Y (G.S.G.S. 4040A/47 SW. Grid Ref. 238505)
16/537 24 June 44 0850B hrs. 1/18,000 (F.L.20") 'A' Prints 3008, 10.

---

APPENDIX A TO DAR/745 (Cont.)

(i) COVER
The A/F is covered except for part of the SE. landing area.

(ii) AIRCRAFT
18 dummy a/c are visible.

(iii) ACTIVITY
The landing area appears serviceable. No signs of activity are apparent.

13. TIERCE L/G (G.S.G.S. 4249/7 J. Grid Ref. 871942)
16/540 24 June 44 1315B hrs. 1/17,800 (F.L.20") 'A' Print 4014.

(i) COVER
The landing ground is fully covered on a single hazy photograph.

(ii) AIRCRAFT
10 small a/c dispersed in hedgerows off [illegible text] boundary.

(iii) ACTIVITY
Landing area fully serviceable. No new activity apparent since 22 June 44. (140/366).
(Sections 1 and 2, pages 1-9, cover Denmark and the Low Countries and are not transcribed.)

3. FRANCE

(i) SORTIES REPORTED ON

US/7GR/2101 of 24 Jun 44 covers strip from LANDEVANT to LA TRINITE SUR MER. Scale 1/5,000 and 1/20,000. Quality good.

US/7GR/2048 of 22 Jun 44 covers BREST. Scale 1/10,500. Quality good.

US/7/2051 of 22 Jun 44 covers BREST PENINSULA. Scale 1/10,000. Quality fair to good.

US/7/2055 of 22 Jun 44 covers strips South of DAOLAS and West of Quimper to PONT L’ABBE to PONT CROIX, also area around BREST. Scale 1/10,000 and 1/20,000. Quality good.

106G/K/106 of 21 Jun 44 covers LOEIENT DE GROIX, South and East of VANNES and CONCARNEAU. Scale 1/18,000. Quality fair.

US/7GR/2046 of 22 Jun 44 covers strip from BATZ to DUARNENEZ. Scale 1/10,000. Quality good.

106G/K/111 of 23 Jun 44 covers BREST. Scale 1/18,000. Quality fair.

106G/K/109 of 22 Jun 44 covers LORIENT area. Scale 1/18,000. Quality fair.

US/7/2071 of 23 Jun 44 covers NEVERS, AUXERRE and COSNE areas. Scale 1/13,500. Quality fair.

106G/1008 of 20 Jun 44 covers DIEPPE, DOULLENS, NEUFCHATEL and RESDIN, ST.POL and OISEMONT areas. Scale 1/9,000. Quality good.

106G/1079 of 24 Jun 44 covers CALAIS, and NOUVELLE EGLISE to MARQUISE. Scale 1/10,000. Quality good, although cloudy.

106G/980 of 20 Jun 44 covers LE TREPORT, BLANGY and POIX. Scale 1/15,000. Quality good.

106G/1075 of 24 Jun 44 covers ST. VALERY-EN-CAUX, FORGES, ROUEN and DIEPPE. Scale 1/9,500. Quality good, though cloudy.

34/757 of 15 Jun 44 covers LE CROISIC, ILE HOUAT and a strip S.W. of LORIENT. Scale 1/8,500. Quality good.

US/7GR/2052 of 22 Jun 44 covers a strip across the BREST PENINSULA. Scales 1/10,000 and 1/20,000. Quality good. MORLAIX, LEZARDRIEUX and TREGUIER. Scale 1/18,000. Quality fair.

106G/K/113 of 24 Jun 44 covers MORLAIX, LEZARDRIEUX and TREGUIER. Scale 1/18,000. Quality fair.

106G/1055 of 23 Jun 44 covers ROUEN, MONVILLE, CLERES. Scale 1/9,800. Quality cloudy.

106G/1087 of 24 Jun 44 covers strip from ST. VALERY EN CAUX to ARGUEIL. Scale 1/9,800. Quality good.

(ii) GENERAL

(a) ROLLENCOURT (4040/72) Possible storage and Rly Sidings.
A siding has been constructed from the main line at 027156 via a wood at 024157 to 019155 where it appears to terminate. A branch line or new road runs from 124157 via a newly constructed bridge 14’ wide over the RIVER TERNOISE at 023159 to a group of buildings and to a woodland road at 021163 where it appears to terminate. Unidentified constructional activity can be seen at 024157 and possible camouflaged storage is visible along the side of the woodland road at 019162.

(3001-3003 of 106G/1008)

(b) PLOUDANIEL (4250/2G/2) A/Tk Ditch
The short section of A/Tk ditch reported in B.869 (8 May 44) has been extended in both directions from 097146 until it is now approx. 900 ft long.

(4024,5 of US/7GR/2046)

(c) KERNEIN (4250/2G/4) Possible Minefield
There is a possible minefield in the small triangular space between the A/Tk ditch and the road on the seaward side at 922981.

(4017,8 of 106G/K/111)

(d) KERGARDEC (4250/2G/6) Stores
At 128720 there are several small buried shelters and two very long shelters along the hedgerows. There is considerable track activity in this area.

(4058,9 of US/7GR/2048)
(e) LANGUIVOA (4250/2H/2) Hutted Camp
In the woods at 072448 there is a hutted camp of about 25 barrack type buildings. Fire trenches and M/G emplacements can be seen in the area, as well as an excavation approx. 9’ x 12’.

(f) PONT L’ABBE (4250/2H/4) Road Blocks
There are concrete road blocks at 099388 and 104386. They are approx. 6’ thick, with 9’ gaps in the centre to allow a single line of traffic to pass.

(g) ANSE DE TREHLIER (4250/4J/1) Strongpoint
On the point of land at 983990 there is a fortified position consisting of wire, small fire positions and a pillbox.

(h) PLEUBIAN (4250/4F/3 & 5) Strong Point
There is a strong point on the headland at 964427.

(j) KERISLES (4250/4H/5) Cable Trench
The cable trench reported as ending at 965078 is seen to extend to 949069.

(k) NOSTANG (4250/4H/5) Road block
There is a road block covered by an occupied A/Tk gun emplacement at 850199.

(l) PLOUHINEC (4250/3H/6) Strongpoint
There is a strongpoint at 806142 containing four small revetted buildings, breastworks and M/G positions, surrounded by wire. There is extensive track activity and what appears to be a heavily camouflaged shelter in the area.

(m) PLOUHINEC (4250/3H/6) Hutments
Small probable barracks areas are seen at 812147, 800139 and 788139. Each consists of a group of 5 or 6 buildings, averaging 25’ x 75’, arranged in a hollow square. There use has been reported from other sources and track activity, in some instances leading to nearby military installations offers confirmation.
(n) KERLEHAU (450/3H/4)  
Strong Point  
6626  
There is a strong point at 661266 which consists of one large building and several smaller ones surrounded by a trench system and a band of wire. (4031,2 of 106G/K/109)

(o) NEUFCHATEL (4250/9E/1)  
AUMALE (4250/9E/3)  
Convoy personnel shelter  
4745 to 4945  
Shelters are seen at intervals along the road from 471455 to 495459. (4089, 90, 91 of 106G/1)

(p) DIEPPE (4250/9D/5)  
Convoy personnel shelters  
2765 to 2768  
Shelters are seen at intervals along the road from 271656 to 275682. (3115, 4112 of 106G/108)

(q) CLERES (4250/9E/3)  
Convoy personnel shelter  
3329 to 3532  
Shelters are seen at intervals on either side of the road from 338292 to 353324. 240366 to 240371. 372372 to 393389. 310304 to 325337. 244377 to 248384. 338383 to 330379. (106G/1089)

(r) NEUFCHATEL (4250/9E/1)  
Convoy personnel shelters  
2140 to 1241. 1738 to 1843  
Shelters are seen at intervals on either side of the road from 219405 to 186411. 260475 to 260475. 186447 to 187457. 173415 to 129413. 393390 to 397396. 193445 to 216450. 176380 to 179409. 273457 to 287459. 240404 to 267399. 183427 to 184432. 256416 to 257419. (106G/1087)

(s) CANY-BARVILLE (4250/8E/2)  
Convoy personnel shelters  
1544 to 9259  
Shelters are seen at intervals on either side of the road from 155445 to 092589. 050571 to 014577. 095457 to 097449. 030639 (4250/8D/6) to 046554. 087530 to 072504. 052603 to 010624 (4250/8D/6). 098509 to 061502. 032609 to 015598. 069489 to 071510. 012600 to 017618. 043532 to 078586. 065596 to 140600. 119514 to 150536. 091561 to 090544. 103589 to 136572. (106G/1087) 926595 to 936624. 055614 to 054595.

(t) ST. VALERY-EN-CAUX (4250/8D/6)  
Convoy personnel shelters
Shelters are seen at intervals on either side of the road from 053644 to 057635, 088628 to 101611, 057623 to 055614, 023637 to 018627, and 100634 to 963640.

(u) **St. VALERY-EN-CAUX** (4250/8D/6) Possible strongpoint 0764
A small trench system and an excavation for a buried shelter are noted at 079640. (3168, 9 of 106G/1087)

(v) **FORGES-LES-EAUX** (4250/9E/4) Convoy personnel shelters 4629-5430
Shelters are seen at intervals on either side of the road from 465293 via 510308 to 492330, 532291 to 535307, 542303 to 538308.

(w) **DIEPPE** (4250/9D/5) Convoy personnel shelters
Shelters are seen beside the road between the following points:
- 208658 and 140630 (8D/6)
- 225673 and 226660 (where cover ends)
- 275688 and 253683
- 275682 and 275695

(x) **ST. VALERY EN CAUX** (4250/8D/6) Convoy personnel shelters
Shelters are seen beside the road between the following points:
- 163648 and 161636
- 133637 and 199634
- 113643 and 112625
- 968629 and 968620

(y) **CANY-BARVILLE** (4250/8E/2) Convoy personnel shelters
Shelters are seen beside the roads between the following points:
- 968620 and 973610
- 007598 and 995608

(z) **BALUEL** (4250/8E/2) Cable trench 9060, 8960, 8961, 8862, 8762.
A cable trench is seen on cloudy cover between the following points:
- 904603 and 902606, 901607 and 695607, 891612-885625 and 877626 (where cover ends)

CONFIDENTIAL

Page 14.
(aa) DIEPPE (4250/9D/5) Convoy personnel shelters

Shelters beside the road are seen between the following points:
245651 and 256609
229655 to 252602

(ab) GISORS (4250/9F/2) Convoy personnel shelters

Shelters beside the road are seen between the following points:
750513 and 730839
725821 and 738828

(ac) YVETOT (4250/8E/4) Convoy personnel shelters

Shelters beside the road are seen between the following points:
000374 to 040338  135283 to 140288  100280 to 070303
971375 to 985400  115383 to 115390

(ad) CLERES (4250/9E/3) Convoy personnel shelters

Shelters beside the road are seen between the following points:
305383 to 270400
192282 to 200295

(ae) HORNOY (4250/15E/1) Cable trench

A cable trench can be seen running from the road 823527 and entering the wood at 816514 whence no further trace of it is visible.

(af) BOIS DE BLENGUES (4250/9D/3) Strong Point

At 493824 in the middle of a field is a small strongpoint consisting of 5 underground shelters surrounded by about 8 M/G posts. The shelters are almost level with the ground, are earthed over, and each has a single entrance.

(ag) BOIS DE BLENGUES (4250/9D/3) Pillboxes

At 497828 are 3 earthed over pillboxes each 30’ x 20’. They are behind a hedge and near a huddled camp (at 498827). Two of these pillboxes have two rear entrances, in the third there is a single entrance. 130 yds in front of these pillboxes there is a row of 4 similar structures at 494828 on the forward slope of an old wide and shallow trench. Two of these four pillboxes are still under construction and from them it appears that they may have a firing slit at ground level along their forward edge.
(ah) PLAGE DU BOIS DE CISE (4250/9D/3) Pillboxes 4883, 4884, 4984, 5085.
There are two more pillboxes at 497845 and 497846 in the small flat bottomed re-entrant at 497847 (see B 883 of 22 May 44) making 5 in all. Another pillbox has been constructed in the small re-entrant at 500850 making two in this locality. At 493845 is a small earthed over pillbox on the cliff top commanding an area to the North. Pillboxes are seen near the O.P. at 488843 and at 481837; there are also possible pillboxes at 483838 and 481837.

(4109,10,11 of 106G/980)

(aj) CRIEL-SUR-MER (4250/9D/5) Pillboxes 3977
There are pillboxes at 395775 and 396793. There are also probable pillboxes at 397773, 398773, 397772 and 397776. These pillboxes lie on the steep hillside and cover the valley to the South.

(4113,4 of 106G/980)

(ak) POIX (4250/10E/1) Cable Trench 8645, 8446
A cable trench can be seen in the wood at 878455 (where cover begins), running through the wood, skirting the BOIS DU QUESNOY and BOIS DES CHARDONETS, crossing the railway to 847469 (where cover ends).

(3172-3174 of 106G/980)

(al) GOURCHELLES (4250/9E/2) Possible Storage 7242
Rectangular excavations on the Western edge of the wooded slopes are seen at 727427. On the S.E. edge of the wood are a large house and outbuildings where much track activity is visible. The wood is well served by road and rail and it is possible that a storage site may develop there.

(4179,80 of 106G/980)

……………………………………………………………………………………………

CONFIDENTIAL
Page 16.

(am) FORMIERE (4250/9E/4) Convoy personnel shelters 6235-6536 6235-6634
Convoy personnel shelters have been prepared either side of the roads from 623354 to CRIQUIERS 642363 and FORMERIE 662344.

(4246-3248 of 106G/980)

(an) LES FRETILS (4250/9D/4) Convoy personnel shelters 5945-6145
Convoy personnel shelters have been prepared either side of the road from LES FRETILS 587459 to 614457.

(106G/980)

(ao) ALLENAY (4250/9D/4) M.T. Bays 5483,5404
The excavations at 549842 mentioned in B 872 of 11 May 44 are now seen to be probable M.T. bays roofed cover. Four more are seen between 549842 and 552837 making 9 in all.

(ap) BETHENCOURT-SUR-MER (4250/9D/4) Pillboxes
5581, 5681
In the rectangle between 557816, 565815, 565820, 557820 there are 14 pillboxes some still under construction, other are completed, toned down and have two entrances. Some small pits possibly for ammunition storage are seen. The pillboxes are about 20’ x 20’ internal measurement.

(aq) BOUVAINCOURT-SUR-BRESLE (4250/9D/4&6) Probable Underground Ammunition Storage
5377, 5378, 5578
15 excavations widely dispersed in different states of completion are being made into the sides of the valley leading through the BOIS DE BOUVAINCOURT 5377, 5378. Activity is also observed round the rectangular wood North of the BOIS DE BOUVAINCOURT at 553790. In view of the close proximity of several Batteries it is probable that this is ammunition storage. No activity is seen on god scale cover of 15 Mar 44 (40723 of J/619)

(ar) BOULAY (4250/9E/6) Trench system
4614
In a clearing in the woods at 461149 there is a small trench system connecting two huts approx. 23 feet square. The huts have blast walls. The trenches appear to be of recent construction.

(as) GOURNAY-EN-BRAY (4250/9E/6) Convoy personnel shelters
4515
Shelters are seen on either side of the road between 463150 to 455152.

(at) ROUEN (4250/9E/5) Convoy personnel shelters
4214 – 4515
Shelters are spaced regularly on either side of the road between 424146 and 453152

(au) FORGES-LES-EAUX (4250/9E/4) Convoy personnel shelters
5023 – 5226
Shelters are seen along the road between 505237 and 526267.

(av) CLERES (4250/9E/3) Convoy personnel shelters
Shelters beside the road are seen between the following points:
177272 to 144290
390313 to 397310

(106G/1055)

(aw) FORGES-LES-EAUX (4250/9E/4) Convoy personnel shelters

Shelters beside the road are seen between the following points:
542314 to 548319
548319 to 567333
539305 to 558289
518353 to 531336

(106G/1055)

(ax) PORTES-LES-VALENCE (M.761/XXX-36) Storage

There are 52 circular excavations on the east side of the railway at 006901. They are 4 to 5 feet in diameter and may be for the storage of small arms ammunition. There appear to be a similar number in the adjacent plantation but these cannot be clearly seen.

(4019,20 of US/7/2071)

(iii) NEW BATTERIES

(a) ST. VALERY (Y.269) K CHAPELLE-SUR-DUN
4250/8D/6 045621

Three open circular emplacements 16’ in diameter are sited in a shallow arc facing N.W. at intervals of 143’ between Nos. 1 & 2 and 150’ between Nos. 2 & 3. The emplacements are occupied by unidentified objects. Three excavations approx. 6’ square are sited on a track immediately N.E. ofd No. 1 emplacement.

(3347,8 of 106G/1087)

(b) EU (Y.271) NN GROS JAQUES II
4250/9D/4 523811

A medium battery in open circular emplacements measuring 30’ in diameter is sited in a gentle arc to fire S.E. Objects which might be guns are in the emplacements and in view of other associated features this is probably an active battery.

(4106,7 of 106G/980)

(c) DIEPPE (Y.270) JJ ARQUES LA BATAILLE
4250/9D/5 256635

Four unoccupied open emplacements 25’ in diameter laid out approx. 50 yards apart in an arc facing North. There are ammunition slits and dugout shelters within the position which is road served.

(3009,10 of 106G/1082)
Four 33’ circular earthen emplacements are seen at 852879. They are laid out in a slightly staggered formation sited to fire N.W. with 370’ between No. 1 and No. 2 positions, and 300’ between Nos. 2 and 3 and Nos. 3 and 4 positions. They contain objects 10’ x 15’, possibly rectangular gun mountings but no barrel is visible. No ammunition bunkers or crew shelters can be seen.

(3132,3 of US/7/2051)

There is a 2 gun heavy railway battery at 909200. A possible third position lies behind one turntable. The turntables are 70’ in diameter and are on very short spurs off the main line running from VANNES to LORIENT.

(7001,7008 of US/7GR/2101)

A minor amount of repair work has been undertaken at this battery which now appears serviceable.

(4008,9 of 106G/1079)

The four casemates have been completed and toned down and the battery has been encircled with wire.

(3004,5 of US/7GR/2048)

This battery position is surrounded by wire and Nos. 1 and 4 casemates have Lt. flak positions mounted on their roofs.

(3007,8 of US/7GR/2052)

In addition to the two buried shelters reported in B.383 entrances to at least two more can be seen. Partway down the cliff face at 857888 there are two 28’ x 32’ casemates, and a possible third casemate, semi-buried and having the appearance of gun casemates. They are about 120’ apart, and would fire east.

(4140,1 of US/7/2051)
(e) BREST (Y.160) AD KERBONN
4250/2G/3 844871

The four shelters previously reported at 844871 now appear completed, and are probably gun casemates. They are sited in a concave arc facing West. Casemates Nos. 1, 2 and 3 are oriented individually to face S.W. and No.4 to face West so that casemate No.3 appears to fire almost directly over No.4.

(3132,3 of US/7GR/2051)

(f) BREST (Y.160) H TOOLBROCH III
4250/2G/3 842951

Four gun casemates are now completed on this site and toned down to blend with their surroundings. They measure 34' x 36' and are sited in a straight line, 100' apart, to fire S.W. The original four emplacements appear unoccupied.

(4143,4 of US/7/2051)

(g) LANNION (NIL) D PLOUGUERNEAU
4250/2F/6 967229

At pinpoint 970228, approximately 1000' East of the four gun casemates, a dummy battery resembling battery 'D' is seen. It consists of four 20' square dummy casemates laid out similarly to the genuine battery, with 100' between No.1 and No.2 positions, 200' between No.2 and No.3 positions and 170' between No.3 and No.4 positions. There is also a centrally located command post resembling that of battery D.
New measurements of the casemates of battery 'D' on this good scale cover show them to be 35' square, with 100' between Nos.1 and 2 and Nos.2 and 3, and 130' between Nos.3 and 4.

(4007.8 of US/7/2051)

(h) LORIENT (Y.101) V LORIENT/TROGUER
4250/3H/4 614254

The four open emplacements are now occupied.

(4036,7 of 106GK/109)

(j) ST. NAZAIRE (Y.99) A KERDREAN
4250/4J/4 & 6 375638

Since 29 Mar 44 (B.839) substantial work has been done at the new positions of this 4 gun railway battery, but the positions are still incomplete. The turntables have a diameter of approx. 75'. Near each of the two old positions is a 45' circular excavation, one of which contains the forms for a circular foundation wall 3' thick. Their purpose is not apparent.

(1029,30 of US/34/757)
All positions are occupied.

All four casemates have now been completed, but No.2 casemate has not yet been toned down. A cable trench runs forward from a point near No.2 casemate.

Since the report B.906 of 14 Jun 44 which states that the Battery was apparently abandoned, the road from the coast has been repaired and the gun barrel can be seen protruding from the completed casemate. It is suggested that this gun may again be in operation.

This battery is again occupied. Interval is seen to be 95 yds and 85 yds respectively, and the emplacements are connected by communication trench and not “slit trench” as previously reported. Around each emplacement are five small ammunition shelters. The probable C.P. is located in rear of Nos.1 and 2 positions a cable trench passes through the position, running from the road junction at 250605 to a probable O.P. on the cliffs at 247695.

No major repair work appears to have been undertaken in the 4 gun position, unoccupied following recent bombing raids but all emplacements appear serviceable.

At the 3 gun heavy battery, many craters have been filled in, and roads in the battery area repaired. The new No.1 emplacement appears to be complete, and all emplacements are occupied and camouflaged.
(v) FIELD BATTERIES

(a) ETIENVILLE (4040/38) 7667

At 764672 there is an occupied field bty. Sited along the line of a hedge facing N.W. The emplacements are approx. 20 ft. across, at 45 yds. Interval and appear to be camouflaged.

(b) GUEIRAN (4250/2F/6) 9622

A field battery is being built at 969228. Nos. 1 and 2 positions are almost complete while work appears to be just starting on Nos. 3 and 4. The battery is sited in earthen emplacements 20 ft. in diameter and 150 ft. apart in a slight arc facing West and is unoccupied.

(c) LAUNAY-CURUNET (4250/2G/6) 124751

There are four 22’ semi-circular emplacements being laid in a gentle arc sited S.W. with 80’ between positions. The No’s. 1, 2 and 3 positions are complete and occupied, while the fourth position is not yet finished. A fourth unemplaced gun is seen in the woods to the West. To the rear of the battery the crew quarters are along a hedgerow. The position is road served.

(d) CAILLEVILLE (4250/8E/2) 9860

A possible field battery consisting of four unoccupied emplacements 16’ in diameter can be seen at 903607. The emplacements are sited at intervals of 83’ between Nos. 1 and 2 and 109’ between 2 & 3 and 3 & 4 and are slightly staggered facing N.N.W.

(e) IELON (4250/8E/2) 0461

A possible field battery consisting of three emplacements, of which No.1. is 24’ in diameter No.2. is 19’ in diameter and No.3. is 16’ in diameter, can be seen at 042615. No.2. emplacement is staggered 250’ East of No.3 emplacement and 275’ S.W. of No.1 gun. Entrance gaps on the S.E. of each emplacement suggest that the field of fire of this battery is probably to the N.W. Although all three emplacements are occupied by objects that might be guns there is a conspicuous absence of track and general activity.

(f) HEUDELIMONT (4250/9D/5) 4475

A 4 gun unoccupied Field Battery facing S.E. can be seen on the hill at 448753. The open emplacements of 20 ft. diameter are 70 yards apart.
(vi) UNDERWATER OBSTACLES

(a) KERGHOFF (4250/2F/6) 9526, 9525, & 9625

There are ramp type underwater obstacles 15 ft apart and in single and double rows from 959262 to 956262 to 959258 and from 963256 to 966256 where cover ends.

(b) KELERDUT (4250/2F/6) 9426

Underwater obstacles of unidentified type appear to have been constructed along the beach approx. 200 ft from H.W.M for a distance of 275 ft. at 945265.

(c) KERJONANNE (4250/4J/1) 0695, 0794

There are obstacles on the beach from 062952 to 080945. These are the ramp type spaced 36’ apart. From 062952 to 075948, closer to the water are two rows of alternately spaced hedge-hogs, 23’ between the rows and 55’ between the obstacles.

(d) PORT NAVALLO (4250/4I/1) 0496

The little bay at 049962 has three rows of unidentified underwater obstacles stretching from end to end.

(e) KERPOINT (4250/4J/1) 0992

At 092929 there are nine ramp type underwater obstacles.

(f) ANSE DE TREHLIER (4250/4J/1) 9899

On the small beach from 984991 to 986991 are two rows of hedgehogs 20 ft. between rows and 14 ft. between the obstacles.

(g) RATZ SUR MER (4250/4J/4 & 6) 3464

Two staggered rows of unidentified underwater obstacles extend across the small bay at BATE SUR MARE from 341647 to 346644.

CONFIDENTIAL
Page 22.
Underwater obstacles extend from 339683 to 340720. A single row of element "C" 25 yds apart and alternating with ramp type obstacles, extends the entire distance. Opposite the strongpoints at 345707, 343719 and 344694 they are reinforced with four to six rows of stakes closely spaced. A single belt of wire extends the entire length of the beach about 15 yds. behind the obstacles.

STANDARD DISTRIBUTION No. 33.

A.C.I.U. 
WDSB/ES/B

External 74
Internal 14

(F.I.R. 387 limited distribution accompanies this report.)
DAILY RAILWAY REPORT NO. 45.

Information received between 1600 hrs. 30.6.44. and 1600 hrs. 1.7.44. (T.A.F. sorties not included)

I. FRANCE

(A) NORD SYSTEM

1. DUNKIRK 106/G/1153 30.6.44. 1745 hrs. 1/3,700 (F.L.36") 26,200' ‘A’ Photos. 3422-3426.

(i) LOADING
   (a) In the Dunes yard loading is moderate in the Sorting Sidings and very light in the Import Sidings. The Forwarding Sidings are, as usual, empty.
   (b) In the Maritime Yard, there is only one short rake of wagons.

(ii) FLATS
     A rake of approximately 20 flats and low siders is seen.

(iii) REPAIRS
     The damaged carriage and wagon sheds have not been repaired.

2. CALAIS 106/G/1153 30.6.44. 1745B hrs. 1/10,600 (F.L.36") 31,800' ‘A’ Photos. 4375-6.

(i) COVER
     Les Fontinnettes Sorting Sidings and the southern portion of the triangular junction are not covered.

(ii) LOADING
     Loading in the Triangular Sorting Sidings is light.

(iii) LOCOMOTIVES
     Five locos are seen, two of which are in steam.

14. DOUAI US/7GR/2155 29.6.44. 1245 hrs. 1/14,200 (F.L.24") 28,500 'A’ Photos. 3053-54, 4052-54.

(i) SUMMARY OF REPAIRS
     A small amount of repair has taken place in the sidings and it is probable that the through lines are open but no definite statement can be made due to lack of stereo cover.

(ii) LOCOMOTIVE AND REPAIR FACILITIES
No apparent repair work has taken place since the last cover on 15.6.44 (106G/887); estimated 100% out of action.

(iii) TERMINAL FACILITIES
Some debris remains on the loading ramps but all tracks appear to be open.

(iv) MARSHALLING YARDS
Some filling of craters and removal of debris has taken place since the last cover on 15.6.44 (106G/887); estimated 25% out of action.

(v) CARRIAGE AND WAGON SHOPS
No apparent repair has taken place; estimated 100% out of action.

(vi) THROUGH LINES
It is probable that all through lines are open but lack of stereo cover prevents a definite statement.

(vii) LOADING
The loading is light.

(viii) LOCOMOTIVES
At least 9 damaged locomotives are seen in the locomotive depot.

21. ABBEVILLE 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’ Photos. 4123-4.

(i) COVER
All but the extreme southern end of the yard is covered.

(ii) LOADING
Loading is light and normal.

(iii) LOCOMOTIVES
5 locos are seen by the engine sheds and in the yard.

(iv) MILITARY FORMATIONS
The photos give part cover of a probable empty “K” or “Kb” type military formation.

23(B) AMIENS/ST.ROCH 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’ Photos. 4170-1.

(i) REPAIRS
Slight clearance of probably damaged wagons has taken place since 28.6.44 (106G/1146). Little or no repairs have been made to the facilities. Estimated 80% unserviceable.

(ii) THROUGH LINES
Both through lines are open.

(iii) FLAK
3 heavy and 5 light flak wagons with attendant vehicles are observed for the first time on a spur just west of the main sidings.

(iv) STABLED TRAINS
Three lengths of trains, one engine headed, are observed, just north of the sidings on the line from ABBEYVILLE to AMIENS. The engine headed train has 14 loaded flats, 13 box wagons and 2 light flak wagons. The two other lengths are stabled on the main line and consist of mixed goods wagons.

23(C) AMIENS/ST.NICHOLAS 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’ Photos. 4194.

(i) COVER
Only a small section of the sidings at ST. NICHOLAS are covered on a single print of fair quality.

(ii) FLAK
The 3 heavy and 3 light flak wagons reported in D.R.R. 43 (106G/1146) are again seen in the sidings.

(iii) MILITARY FORMATIONS
3 possible military formations apparently loaded, are visible but poor cover prevents an accurate count or interpretation.

CONFIDENTIAL
Page 3.

DAILY RAILWAY REPORT NO. 45. (contd).

AMIENS-MONTDIDIER LINE 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’ Photos. 4191-2.

(i) FLATS
A rake of wagons containing 23 flats, 27 box wagons and 7 low siders is seen on a small dead end siding at MOREUIL on track section N.125.

AMIENS-ABBEVILLE LINE 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’ Photos. 4157-8.
(a) PICQUIGNY

(i) LOCOMOTIVES
6 locos are observed stabled on a small passing loop at PICQUIGNY on the track section N.134.

(b) HANGEST-SUR-SOMME (Photos 4147-9)

(i) FLATS
In a passing loop at HANGEST -SUR-SOMME on track section N.134 are seen two lengths of wagons as follows:-

(a) 20 empty flats, 8 box wagons, 2 light flak wagons and 1 high sider.
(b) 28 loaded flats, 17 possible flats loaded and sheeted, 7 box wagons, 2 light flak wagons and 1 empty flat.

(c) AILLY-SUR-SOMME (Photos 4161-3)

(i) LOCOMOTIVES
3 locos are seen stabled on a small dead-end siding at AILLY-SUR-SOMME on track section N.134 and 7 probable shunting engines are visible stabled on one of the sidings.

(ii) FLATS
A rake of 45 flats and 19 box wagons is seen stabled on the main line just west of the station sidings.

AMIENS-DOUMLLENS LINE 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000' ‘A’ Photos. 3165-3176.

(i) FLATS
(a) On the track section N.137, in a siding approximately 2 miles North of AMIENS ST. ROCH the following formation is seen:-

11 empty flats, 2 light flak wagons with attendant vehicle, 5 empty flats, 3 box wagons, one empty flat, and two high siders.

DOUMLLENS-ST. POL LINE 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’ Photos. 3325, 3326.

(i) FLATS
In the BOUQUEMAISON sidings on track section NORD 189, approximately 4 miles North of DOULLENS, the following formations of wagons are seen:-

One length consisting of 2 probable passenger coaches, 7 loaded flats, 2 box wagons, 7 loaded flats and 2 box wagons, a rake of 7 loaded flats and 2 box wagons, and one light flak wagon and attendant vehicle.

---

DOULLENS-LE TREPORT 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000' ‘A’ Photos. 4376-4377.

(i) MAIN LINE OUT
On track section N.136 approximately 30 miles West of DOULLENS near NEUVILLE-AU-BOIS the single track line is out in at least three places by unfilled craters.

LE TREPORT-ABANCOURT LINE 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000' ‘A’ Photos. 3036-7.

(i) FLATS
3 rakes of flats are seen on the small sidings at VIEUX-ROUEN-SUR-BRESLE on track section N.133. The rakes consist of the following:-

(a) 14 flats and 11 box wagons.
(b) 20 flats.
(c) 25 flats and 3 box wagons.

ST. OMER-BETHUNE LINE 106G/1166 29.6.44. 1140 hrs. 1/8,000 (F.L.36") 24,000' ‘A’ Photos. 3306-3307.

(i) FLATS
On the ISBERGUES sidings on track section N.190, 12 miles South East of ST. OMER, the following formations are seen:-

(a) 4 flats, 4 high siders, 2 box wagons, 9 flats, 2 high siders and 3 flats.
(b) 21 flats, and one high sider.

AMIENS-BEAUVAIS LINE 106G/1156 29.6.44. 1115 hrs. 1/9,300 (F.L.36") 28,000 ‘A’ Photos. 4332-3.

(i) FLATS
The small station sidings at PROUZEL on track section N.130 are filled with several rakes of wagons for a total count of 47 empty flats, 42 box wagons, and 3 or 4 open wagons. On 24.6.44 (D.R.R. 42) 17 flats and 17 box wagons were present.

HAZEBROUCK - LILLE LINE 106G/1166 29.6.44. 1140 hrs. 1/8,000 (F.L.36") 24,000’ ‘A’ Photos. 3278-3279, 4276-4277

(i) MILITARY TRAINS
The two empty undedded (sic) “I” trains seen in the STRAZEELE sidings on the track section N. 198, 7 miles East of HAZEBROUCK, on 22.6.44 (106G/1029) are still in the siding but both are now cut, as a result of a bomb hit in the middle of the two trains. Three box wagons on each train are damaged.

BOULOGNE – ST. OMER LINE 106G/1179 30.6.44. 1900 hrs. 1/7,400 (F.L.36") 22,000’ ‘A’ Photos. 4118, 4074.

DAMAGE
(a) At least 10 craters are seen in the station sidings at WIZERNE. All tracks are cut and about 20 vehicles are damaged.
(b) The main line, track section N.205, is cut by bomb craters in at least 15 places, the damage extending over about 1½ miles of track immediately to the east of the sidings.

--------------------
CONFIDENTIAL
Page 5.

DAILY RAILWAY REPORT NO. 45. (continued).

(B) OUEST SYSTEM

63 LE MANS 106G/1134 27.6.44. 1045 hrs. 1/9,500 (F.L.36") 28,000’ ‘B’ Photos. 4013 - 64194.

(i) COVER
The Marshalling Yard is fully covered on partially cloud obscured photographs of poor quality.

(ii) REPAIRS
Since 25.6.44 (106G/1111) no repair work has been accomplished. All through lines are open except the NANTES-RENNES line which is cut near the Loco. Depot. This line was also cut on 25.6.44 but not reported.

(iii) LOCOMOTIVES
Poor quality of photographs precludes a statement.
(iv) **FLAK**

5 new type flak wagons are still seen in the dead end shunting lines Point 397299 (G.S.G.S. 4250/7H4). They were in the same position on 8.6.44 (US/7/1784).

**72 ST.MALO** 106GK/117 30.6.44. 1345 hrs. 1/18,500 (F.L.20") 30,800 'B'

Photos. 3047, 3048.

(i) **LOADING**

Loading is light.

(ii) **FLATS**

A rake of 15 flats is seen.

**94 LA ROCHELLE** 106GK/116 30.6.44. 1335 hrs. 1/17,000 (F.L.20") 28,300 ‘A’

Photos. 4045, 4046.

(i) **LOADING**

Loading is moderate in both the docks and sorting sidings.

(ii) **LOCOMOTIVES**

Of 16 locomotives visible, one is in steam.

**95 LA PALLICE** 106GK/116 30.6.44. 1340 hrs 1/17,000 (F.L.20") 28,300 ‘A’

Photos. 4094-4095.

(i) **LOADING**

The sidings are empty.

---

**CONFIDENTIAL**

**Page 6.**

**ROUEN/SOTTEVILLE – GLOS MONTFORT LINE.**

US.7GR/2112 25.6.44. 1230 hrs. 1/14,000 (F.L.24") 28,000 ‘A’ Photos. 4102-03.

(i) **DAMAGE**

The railway bridge across the Seine river on the ROUEN/SOTTEVILLE – GLOS MONTFORT line (track section W.119), 4½ miles East of LA LONDE is seen to be severely damaged. The West abutment and 210' of the deck of the bridge have been completely destroyed.
(C) SUD OUEST SYSTEM

112A TOURS/ST. PIERRE DE CORPS 106G/1161 29.6.44. 1030 hrs. 1/9,000 (F.L.36") 27,000 'A' Photos. 4009/15.

(i) SUMMARY OF REPAIR WORK

No further repairs are apparent since 23.6.44 (D.R.R. 41).

(ii) LOCOMOTIVES

24 locomotives (2 in steam) are seen in the loco depot.

(iii) LOADING

Little movement of traffic is seen throughout the yard. There is a very limited amount of working between sections.

112B TOURS/LA RICHE 106G/1161 29.6.44. 1030 hrs. 1/9,000 (F.L.36") 27,000 'A' Photos. 4017.

(i) DAMAGE AND REPAIRS

Since the repairs reported in D.R.R. 44 (106G/1134) the bridge has been again attacked. The attack was centred on the Northern end and approaches of the bridge. The new damage has all but severed one arch and seriously damaged two others. Further damage to the embankment North of the bridge has cut one track. Repairs to the damaged embankment south of the bridge have progressed since last reported in D.R.R.44 (106G.1134) (27.6.44). The TOURS junction appears to have both tracks open. A crossover has been repaired.

(ii) THROUGH LINES

No working is possible over the bridge and the following lines are affected:

TOURS – CHATEAUDUN S.W.120
TOURS – CHATEAU-DU-LOIRE S.W.140
SAUMUR – CHATEAUDUN W.214 and S.W.120.
SAUMUR – CHATEAU-DU-LOIRE W.214 and S.W.140.

(iii) TRAFFIC
A mixed goods train consisting of 62 wagons loco headed South is standing on the Northern approach embankment between the station and the bridge. A rake of 14 empty flat wagons is seen on the other through line just South of the station.

DAILY RAILWAY REPORT NO. 45. (continued).

112C TOURS/MAIN STATION 106G/1161 29.6.44. 1030 hrs. 1/9,000 (F.L.36")
27,000’ ‘A’ Photos. 4006 - 8.

(i) SUMMARY OF REPAIR WORK

Full cover of the passenger station and other facilities reported in D.R.R.44 (106G/1134 27.6.44) confirms the assessment made on that date, from part cover, and shows that no repairs have been carried out to the passenger station.

113 VIERZON 106G/1161 29.6.44. 1030 hrs. 1/3,000 (F.L.36") 9,000’ ‘A’
Photos. 3093, 4096.

(i) COVER

The Loco Depot is only partially covered and there is little stereo cover for the remainder of the yard.

(ii) LOADING

Loading is light in the Reception and Forwarding Sidings and heavy in the Sorting Sidings.

(iii) FLATS

There are several rakes of flats in the sidings.

114 BOURGES 106G/1161 29.6.44. 1030 hrs. 1/3,000 (F.L.36") 9,000’ ‘A’
Photos. 4101, 4106.

(i) COVER

The west end of the sidings is not covered and there is no stereo cover for the remainder.

(ii) LOADING

Loading is moderate.
(iii) LOCOMOTIVES

At least 6 locomotives are present.

121 ANGOULEME 106G/1153 27.6.44. 1045 hrs. 1/2,600 (F.L.14") 3,000'
'B' Photos. 1101-4, 2106-8.

(i) COVER

The yard is fully covered on large scale prints which do not give stereoscopic cover.

(ii) SUMMARY OF REPAIR WORK

No repairs appear to have been carried out since 22.6.44.
(106G/1031).

(iii) LOCO SHED AND LOCO REPAIR FACILITIES

(a) The N. loco shed shows no sign of further clearance or repair but the turntable is apparently fully serviceable. An accurate count of locomotives cannot be made owing to poor quality (40% unserviceable).

(b) The S. loco shed and loco repair shop show no change. 100% unserviceable.

(iv) TERMINAL FACILITIES

No change is apparent in either Passenger or Goods Stations. 100% unserviceable.

(v) MARSHALLING YARD

No repairs are visible and damaged rolling stock remain in the same position. 100% unserviceable.

(vi) THROUGH RUNNING LINES

At least 2 lines in the centre of the yard appear to be open.

(vii) FLATS

One length containing 15 empty flats is visible in the yard.

127 BORDEAUX/ST. JEAN 106G/113 27.6.44. 1045 hrs. 1/9,500 (F.L.36")
28,000' 'B' Photos. 3175 - 6.
(i) COVER

The yard is covered on partially cloud obscured prints of poor quality.

(ii) LOADING

The loading in the part seen is heavy.

BORDEAUX-COUTRAS LINE 106G/1134 27.6.44. 1045 hrs. 1/9,500
(F.L.36")
28,000' ‘B’ Photos. 3191 - 3.

(i) COVER

The station sidings at LIBORNE are fully covered on poor quality photographs.

(ii) MILITARY FORMATIONS

(a) 2 probable military formations are visible in the sidings at LIBORNE approx.. 10 miles S.W. of COUTRAS on track section S.W.238.

(b) In the junction sidings of track sections SW.237 and SW.238 at LIBORNE 3 train lengths of probable military formations, one loaded, are visible.

(iii) LOADING

The loading in the part seen is heavy.

138 TOULOUSE US.7GR/2125 29.6.44. 1800 hrs. 1/11,000 (F.L.24")
22,000' ‘A’ Photo 3030.

(i) LOADING

Loading of the yard is moderate but shows some increase since 24.6.44 (106G/1081).

..........................................................
CONFIDENTIAL
Page 9.
DAILY RAILWAY REPORT NO. 45. (continued).

(ii) LOCOMOTIVES
At least 33 locomotives are visible, 18 of which are steam and 15 are electric.

(iii) FLATS

A total of 40 empty flats is visible in 2 lengths, one of 24, and the other of 16.

TOULOUSE-MONTAUBIN LINE US.7GR/2125 29.6.44. 1800 hrs. 1/11,000 (F.L.24") 22,000’ ‘A’ Photo 3004.

The double track is cut by bomb craters in 4 places approx.. ¾ of a mile S. of Tourre Station on track section SW.264.

POITERS-CHATELLERAULT LINE 106G/1134 27.6.44. 1045 hrs. 1/9,500 (F.L.36") 28,000’ ‘B’ Photos. 4147-9.

(i) MILITARY FORMATION

An unheaded ‘K’ train is seen in the loop siding approx.. 3 miles N.E. of POITIERS on track section SW.142.

(ii) FLATS

A rake of 35 flats and 2 groups of 8 and 6 box wagons are seen in the adjacent loop sidings to the south approx.. 3 miles N.E. of POITIERS on track section SW.242.

TOURS-CHATEAU DU LOIR LINE 106G/1134 27.6.44. 1045 hrs. 1/9,500 (F.L.36") 28,000’ ‘A’ Photos. 4053 - 5.

(i) 6 train lengths, 4 of which are approximate to military formations, are seen at the junction approx.. 3 miles N.W. of TOURS on track sections SW.140 and SW.120.

(ii) There are two locos. Visible.

BLERE 106G/1161 29.6.44. 1030 hrs. 1/10,000 (F.L.36") 30,000’ ‘S’ Photos. 4043 - 4044.

FLATS

A rake of approximately 40 flats is seen about 3½ miles east of BLERE on track section SW.138.

(D) SUD-EST SYSTEM

169 DIJON 106G/1159 29.6.44. 1140 hrs. 1/9,500 (F.L.36") 29,000’ ‘A’
(i) LOADING

The loading is heavy.

(ii) LOCOMOTIVES

Fifty locomotives are in steam, one seen in the loco depot.

(iii) MILITARY FORMATIONS.

One possible loaded 'I' train is seen in the main passenger station sidings.

CONFIDENTIAL
Page 10.

183 BOURG 106G/1153 30.6.44. 1745B hrs. 1/10,600 (F.L.36") 31,800 'A'
Photos. 3191 - 2.

(i) COVER

Only the southern part of the yard is covered on cloud obscured prints.

(ii) LOADING

Loading in the parts seen is moderate.

(iii) LOCOMOTIVES

Eleven locos are visible in the loco depot and two in the sorting sidings.

188 LYONE/LA MOUCHE 106G/1153 30.6.44. 1745B hrs. 1/10,600
(F.L.36")
31,800 ‘A’ Photos. 3104, 4101-3.

(i) LOADING

Loading is heavy throughout the yard.

(ii) LOCOMOTIVES

About 40 locomotives are visible in the loco depot.

(iii) MILITARY FORMATIONS
Several rakes of flats are seen (some loaded) but none of them conform to any of the standard formations. Short lengths of flats are also seen coupled to box wagons.

(E) **EST SYSTEM**

211 VERDUN 106G/1167 29.6.44. 1230 hrs. 1/9,300 (F.L.36") 28,000’ ‘A’ Photos. 4086 - 7.

(i) COVER

The whole area is covered, but only on hazy prints.

(ii) LOADING

Loading is very light.

218 CHALONS SUR MARNE 106G/1167 29.6.44. 1230 hrs. 1/9,400 (F.L.36") 28,000’ ‘B’ Photos. 3002-3, 4008-9.

(i) COVER

The N. half of the Sorting sidings is not covered, and the area covering the Goods Depot and Loco Sheds is largely cloud obscured.

(ii) LOADING

In the parts seen loading is moderate and shows decrease.

222 VITRY LE FRANCOIS 106G/1163 29.6.44. 1100 hrs. 1/10,000 (F.L.36") 30,000’ ‘A’ Photos. 3249 - 52.

(i) REPAIRS

Only very slight clearance of damaged stock has taken place since 28.6.44 (106G/1150). All through lines and sidings remain cut.

(ii) ACTIVITY
A shunting engine in steam is observed at the Eastern end of the sidings. A rake of 14 flats is observed on the main line just east of the sidings having arrived since 28.6.44 (106G/1150).

(iii) LOCOMOTIVES

Approximately 25 locos are seen stabled near the engine shed, none of which appear to be in steam.

(iv) MILITARY FORMATIONS

At least one of the train lengths of wagons stabled on the main line east of VITRY LE FRANCOIS as reported Sup. D.R.R 40, has departed. Coverage extends for only a short distance east of the sidings and no statement can be made as to the other train lengths.

241 NEUFCHATEAU 106G/1159 29.6.44. 1140 hrs. 1/9,500 (F.L.36")

Photos. 4062/63.

(i) LOADING

The loading is moderate showing (sic) an increase since D.R.R.41 (106G/1132  25.6.44.

(ii) LOCOMOTIVES

15 are visible – 1 in steam.

(iii) HOSPITAL TRAINS

A hospital train of 20 vehicles is seen N. of the station moving in a Northerly direction.

245 CHAUMONT 106G/1159 29.6.44. 1150 hrs. 1/9,500 (F.L.36") 29,000’ ‘A’

Photos. 4120.

(i) SUMMARY OF REPAIRS

Repairs effected have been mainly confined to the through running lines and the station sidings. Some repairs, however, have been carried out in the Goods Depot, and debris is being removed from the roundhouses.

(ii) LOCO SHED AND LOCAL REPAIR FACILITIES
The wreckage of the W. roundhouse is being cleared. The E. roundhouse remains untouched. The E. turntable is being repaired and may be partially serviceable. No work has been carried out on the loco repair shops. Some tracks have been cleared in the loco depot, particularly those serving the coaling bunkers. Nine locos are seen in the depot, one in steam. 75% unserviceable.

(iii) TERMINAL FACILITIES

(a) Passenger Station

All tracks have been cleared and relaid. Debris has been cleared from the station buildings. 20% unserviceable.

(b) Goods Depot

Only repairs to tracks have been carried out. 30% unserviceable.

(iv) STATION SIDINGS

All tracks have been repaired. Now fully serviceable.

(v) THROUGH RUNNING LINES

Both lines have been repaired and are fully serviceable.

247 CULMONT CHALINDREY 106G/1158 29.6.44. 1150 hrs. 1/9,500 (F.L.36")
29,000‘A’ Photos. 3138-41, 4138.

(i) LOADING

The loading is light, showing decreases since last reported on 30.5.44 (US/7/1664).

(ii) LOCOMOTIVES

Ten locomotives are seen in the loco depot, two in steam. Fourteen others are seen in other parts of the yard, of which 3 are in steam.

249(A) MULHOUSE/TOWN STATION
106G/1163 29.6.44. 1100 hrs. 1/10,000 (F.L.36") 30,000‘A’ Photos. 4132-9.
106G/1159 29.6.44. 1150 hrs. 1/9,800 (F.L.36") 29,000‘A’ Photos. 3477-81.

(i) REPAIRS
All facilities appear to be fully serviceable.

(ii) LOADING

Loading is moderate in the sidings and heavy on the serving tracks for the C. and W. workshops. Many rakes of wagons, mostly box wagons, are seen. A total of 26 empty and 10 loaded flats are in the sidings.

(iii) LOCOMOTIVES

2 locos, both of which are in steam, are observed on 106G/1163.

(iv) TRAFFIC

During the interval between the two sorties, several trains have arrived and several departed.

249(B) MULHOUSE/NORD
106G/1163 29.6.44. 1100 hrs. 1/10,000 (F.L.36") 30,000’ ‘A’ Photos. 4139-40.
106G/1159 29.6.44. 1150 hrs. 1/9,800 (F.L.36") 29,000’ ‘A’ Photos. 3399-340 [illegible text].

(i) COVER

Sortie 106G/1159 covers all the marshalling yard and the entrances at both ends. Sortie 106G/1165 covers the central part of the marshalling yard only.

(ii) SUMMARY OF REPAIRS

All facilities have been repaired and are 100% operational except for the following:-

(a) Eastern Loco Depot – 6 of the 13 bays remain damaged. Repairs and clearance appear to be in progress. 30% unserviceable.

(b) Transhipment Shed – The damaged western end is being repaired. 10% unserviceable.

(iii) LOADING
The loading is moderate. Several rakes of mixed wagons are visible. A total of 95 flats is seen on the sidings.

(iv) LOCOMOTIVES

Approximately 25 locos are visible on both sorties; 2 being in steam. Nearly all are observed in different positions from those seen on last cover.

(v) MILITARY FORMATIONS

A possible military formation consisting of 19 box wagons, 15 flats and 1 possibly 2 light flak wagons, is seen on a spur siding just to the Northwest of the Marshalling Yard.

(vi) TANK WAGONS

2 long rakes of tank wagons are stabled in the Eastern end of the Yard. A total of 117 is seen.

(i) REPAIRS

Repair work on the Loco Depot continues. 5% unserviceable.

(ii) LOCOMOTIVES

9 locos, 3 of which are in steam, are visible on 106G/1163.

6 locos, none of which appear to be in steam, are seen on 106G/1159.

(iii) THROUGH LINES

Within the limits of the cover the lines appear to be open.

250 VESOUL
106G/1159 29.6.44. 1150 hrs. 1/9,300 (F.L.36") 29,000' ‘B’ Photos. 4230-2.
106G/1163 29.6.44. 1100 hrs. 1/10,000 (F.L.36") 30,000' ‘B’ Photos. 3148-50.
Loading is heavy and includes a large number of unloaded flats.

(ii) LOCOMOTIVES

34 locomotives are seen near the Locomotive Depot, 8 of them in steam.

(iii) A LOADED MILITARY TRAIN, consisting of 1 loco, 3 box, 17 flats, 6 box, 5 flats, 5 box, 3 flats, 1 high sider, 6 flats, 5 box, 1 flat, 1 box, is seen approaching VESOUL along route E.245.

251 BELFORT 106G/1159 29.6.44. 1150 hrs. 1/9,500 (F.L.36") 29,000 ‘A’ Photos. 4280/84.

(i) SUMMARY OF REPAIR WORK

Very few repairs have been carried out to the loco depot and repair shops. The passenger station appears normal. Some tracks have been relaid in the Carriage and Wagon repair shop.

(ii) LOCO SHED AND LOCO REPAIR FACILITIES

Much debris remains to be cleared and many craters are still unfilled. The roundhouse and repair shops remain 80% unserviceable.

(iii) TERMINAL FACILITIES

a) Passenger Station

Now fully operative.

(b) Goods Depot

Now fully operational.

(iv) STATION SIDINGS

All tracks have been relaid. Now fully serviceable.

(v) THROUGH RUNNING LINES

All lines are open.
RHEIMS – SOISSONS LINE
US/7GR/2112 25.6.44. 1230 hrs. 1/14,000 (F.L.24") 28,000 ‘A’ Photos. 3023-2.

MILITARY FORMATIONS.

Two unloaded trains, approximating to the ‘K’ type military train, are seen in the sidings at FISKES on track section [illegible text]. The trains are not engine headed. There is also a length of 6 box wagons and 41 flats in the sidings.

DIJON-CHALINDREY LINE 106G/1159 29.6.44. 1140 hrs. 1/9,000 (F.L.36") 29,000 ‘A’ Photos. 3156-57.

At least 220 empty flat wagons, 70 unloaded flat wagons and I unloaded K type military train are seen at the large [illegible text] at IS SUR TILLE on S.E.127 and E.237.

TOUL PAGNY-SUR-MEUSE LINE
106G/1159 29.6.44. 1140 hrs. 1/9,500 (F.L.36") 29,000 ‘A’ Photos. 4006.

Two unloaded I type military trains and approximately twenty unloaded flats are seen at PAGNY SUR MEUSE on track section E.191.

TOUL PAGNY-SUR-MEUSE LINE
106G/1159 29.6.44. 1140 hrs. 1/9,500 (F.L.36") 29,000 ‘A’ Photos. 4013.

An unloaded I type military train is seen at FOUG station on track section E.191.

TOUL DOMGERMAIN LINE
106G/1159 29.6.44. 1140 hrs. 1/9,500 (F.L.36") 29,000 ‘A’ Photos. 4029.

A possible loaded Sp military train is seen heading South just North of DOMGERMAIN station on track section E.191.

DOMGERMAIN NEUFCHATEAU LINE
106G/1159 29.6.44. 1140 hrs. 1/9,500 (F.L.36") 29,000 ‘A’ Photos. 4039.

A loaded I type military train and eight exceptionally long tank wagons are seen on the sidings. Twenty-five rail cars are seen in the dead end sidings. The above are located at BARISEY LA COTE on track section E.189.

BOLOGNE-ANDELOT LINE
106G/1159 29.6.44. 1140 hrs. 1/9,500 (F.L.36") 29,000 ‘A’ Photos. 3080.
A loaded military train consisting of 30 loaded flats, 3 box wagons, 6 loaded flats and 6 box wagons is seen heading South, just North of CHANTRAINES HALT on track section E.169.

VITRY LES FRANCOIS – CHALONS SUR MARNE LINE
106G/1163  29.6.44.  1100 hrs.  1/10,000  (F.L.36") 30,000’ A’ Photos. 4239-4241.

(i)  MAIN LINE CUT

At least one track, of the two track line on track section EST.132, is cut by a crater approximately 2 miles North of VIRTY (sic) LE FRANCOIS.

VESOUL-JUSSEY LINE
106G/1163  29.6.44.  1100 hrs.  1/10,000  (F.L.36") 30,000’ A’ Photos. 4136-4137.

(i)  FLATS

On the Vaivre sidings, 3 miles north of VESOUL on track section EST.244, the following length of wagons is seen:

9 empty flats, 6 box wagons, 16 empty flats, 6 box wagons and 7 flats.

VESOUL-BELFORT LINE
106G/1163  29.6.44.  1100 hrs.  1/10,000  (F.L.36") 30,000’ A’ Photos. 4098-4099.

(i)  FLATS

Approximately 15 miles west of BELFORT on track section EST.249 a train consisting of the following wagons is seen moving east towards BELFORT:

17 bix (sic) wagons and 9 loaded flats.

CHAUMONT - JOINVILLE LINE
106G/1163  29.6.44.  1100 hrs.  1/10,000  (F.L.36") 30,000’ A’ Photos. 4203-4204.

(i)  FLATS

Near JONCHERY, 3 miles north of CHAUMONT on track section EST.168 the following length of wagons is seen:
6 empty flats, 12 box wagons and 9 flats.

CHAUMONT - JOINVILLE LINE
106G/1163 29.6.44. 1100 hrs. 1/10,000 (F.L.36") 30,000’ ‘A’ Photos. 4206, 07.

(i) FLATS

On the BOLOGNE sidings, 9 miles north of CHAUMONT on track section EST 168, the following length of wagons is seen:

21 loaded flats, 3 box wagons, 5 loaded flats and 7 box wagons.

II. BELGIUM

301 OSTEND 106G/1153 30.6.44. 1745 hrs. 1/9,600 (F.L.36") 29,000’ ‘B’ 
‘C’
Photos. 4487 - 8.

(i) COVER

The Western part of the sidings including the Loco Depot is obscured by deep shadow and a patch of cloud precenting (sic) any definite statement.

CONFIDENTIAL
Page 17.

DAILY RAILWAY REPORT NO. 45. (continued).

(ii) LOADING

State of loading in the sidings is light showing slight increase since 28.6.44, 0815 hrs.

(iii) LOCOMOTIVES

No locomotives have been observed.

(iv) MILITARY FORMATIONS

One ‘I’ and one ‘Im’ type trains, unheaded, with empty flats are present in the sidings.

ANTWERP (G.S.G.S. 4040 Sheet 23 and 33)
106G/1170 29.6.44. 1610 hrs. 1/8,800 (F.L.36") 26,400’ ‘B’ Photos. 3013, 14.

A troop of 4 heavy rail-mounted heavy flak is seen on the sidings at (648013) alongside Bassin Canal ‘B’. These have arrived since the sidings were last covered on 20.6.44 (106G/975).
III. HOLLAND

372 ROTTERDAM  106G/1180  30.6.44.  1910 B hrs.  1/10,000  (F.L.36")
30,000’ ‘B
Photos. 4127 – 29, 4187.

(i) LOADING

Loading is light and normal in the Ijsselmonde Sidings and the Spoorweg Haven Dock Sidings.

(ii). LOCOMOTIVES

3 locos, two of which are in steam, are seen in the Ijsselmonde Sidings. The other sidings have 7 locos, 3 of which are in steam.

STENDAL  (G.S.G.S.  4081 Sheet 63  900458)
S.A.2208  29.6.44.  0952 hrs.  1/36,000  (F.L.7")  21,000’ ‘A’ Photos. 453/383, 1, 2.

(i) LOADING:  Moderate.

(ii) LOCOMOTIVES:  8 are visible.

(iii) FLAK:  3 possibly 4 possible flak wagons.

CONFIDENTIAL

A.C.I.U.

[illegible text]/AH/B

DISTRIBUTION NO. 8

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td>107</td>
</tr>
<tr>
<td>Internal</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
</tr>
</tbody>
</table>
Transcribed Map of daily Railway Report No 45. For original see TNA AIR 29/329.
Appendix 4

Master French Railway System Maps

The following six pages show transcribed the master maps for the French railway system used by Medmenham to report out and annotated versions of these maps were sent out with the Daily Railway Reports as discussed in Chapter 5. The maps are for the, Sud Est System, Sud Ouest System, Nord System, Est System, Ouest System and the Paris area. Producing the maps with each report allowed the key information to be assimilated faster.

---

648 TNA AIR 29/329, CIU Appendices 3829 (part II) to 3835.
BIBLIOGRAPHY

Archives

Air Force Historical Research Agency (United States)

Papers on:

USSAFE History of Directorate of Intelligence

US Photographic Reconnaissance in Europe and North Africa

General Spaatz

Brigadier General Elliot Roosevelt

Miscellaneous papers on Medmenham

The National Archives

ADM 1. Admiralty, and Ministry of Defence, Navy Department: Correspondence and Papers

ADM 199. Admiralty: War History Cases and Papers, Second World War

AIR 1. Air Ministry: Air Historical Branch: Papers

AIR 2. Air Ministry and Ministry of Defence: Registered Files

AIR 14. Air Ministry: Bomber Command: Registered Files

AIR 19. Air Ministry and Ministry of Defence, Air Department: Private Office Papers

AIR 20. Air Ministry, and Ministry of Defence: Papers Accumulated by the Air Historical Branch


AIR 27. Air Ministry and Successors: Operations Record Books, Squadrons

AIR 34. Air Ministry: Central Interpretation Unit, predecessors and related bodies: Reports and Photographs

AIR 40. Air Ministry: Directorate of Intelligence and related bodies: Intelligence Reports and Papers

AIR 41. Air Ministry and Ministry of Defence: Air Historical Branch: Narratives and Monographs

AVIA 15. Ministry of Aircraft Production and predecessor and successors: Registered Files

CAB 16. Committee of Imperial Defence, Ad Hoc Sub-Committees: Minutes, Memoranda and Reports

CAB 66. War Cabinet and Cabinet: Memoranda

CAB 80. War Cabinet and Cabinet: Chiefs of Staff Committee: Memoranda

CAB 84. War Cabinet and Cabinet: Joint Planning Committee, later Joint Planning Staff, and Sub-committees: Minutes and Memoranda

CAB 112. War Cabinet: Vulnerable Points Advisor: Files

CAB 120. Cabinet Office: Minister of Defence Secretariat: Records


FO 1093. Foreign Office: Permanent Under-Secretary’s Department: Registered and Unregistered Papers

HW 48. Government Code and Cypher School: Hut 3: Intelligence Reports and German Plans for the Sea-born Invasion of Britain
WO 106. War Office: Directorate of Military Operations and Military Intelligence, and predecessors: Correspondence and Papers

WO 171. War Office: Allied Expeditionary Force, North West Europe: War Diaries, Second World War


WO 223. War Office: Staff College Camberley, 1947 Course Notes on D-Day Landings and Ensuing Campaigns

The Science Museum Archives

D 7/1 Barnes Wallis Papers

The Royal Air Force Museum Archives

RAF Air Publications

The Medmenham Archive

Unaccessioned RAF Medmenham Operational Record Book 1941 – 1947

Acc 516 Group Captain Cator memoirs

Acc 1971 Wing Commander Kendal memoirs.

Selected papers.

Books

Abrams, Leonard N., Our Secret Little War (Bethesda MD: International Geographic Information Foundation, 1991)

Air Historical Branch RAF, RAF and SOE: Special Duty Operations in Europe During WW2: An Official History (Barnsley: Frontline, 2016)

Air Historical Society, Bracknell Paper No 7 – Air Intelligence (UK: Fotodirect Ltd, 1997)


Alexander, Martin S., ed., Knowing Your Friends: Intelligence Inside Alliances and Coalitions from 1914 to the Cold War (Abingdon: Routledge, 1998)


Andrew, Christopher, For the President’s Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush (New York: Harper Collins, 1995)


Andrew, Christopher, The Secret World: A History of Intelligence (London: Allen Lane, 2018)

Andrew, Christopher, Richard J. Aldrich and Wesley K. Wark, eds., Secret Intelligence: A Reader (Abingdon: Routledge, 2009)

Andrew, Christopher and David Dilks, The Missing Dimension: Governments and Intelligence Communities in the Twentieth Century (London: Macmillan, 1984)


Baldoli, Claudia, Andrew Knapp and Richard Overy, eds., *Bombing States and Peoples in Western Europe 1940-45* (London: Continuum, 2011)

Barbier, Mary Kathryn, *D-Day Deception: Operation Fortitude and the Normandy Invasion* (Mechanicsburg, PA: Stackpole, 2009)


Bennett, Ralph, *Behind the Battle: Intelligence in the War with Germany, 1939-1945* (London: Pimlico, 1999)


Bond, Brian, *Britain’s Two World Wars against Germany: Myth, Memory and the Distortions of Hindsight* (Cambridge: Cambridge University Press, 2014)

Bond, Brian and Michael D. Taylor, *The Battle of France and Flanders, 1940: Sixty Years on* (London: Leo Cooper, 2001)


Calvocoressi, Peter, *Top Secret Ultra* (Cleobury Mortimer: M & M Baldwin, 2001)

Calvocoressi, Peter and G Wint, eds., *The Story of World War II* (New York: Pantheon, 1972)


Connelly, Mark, *We Can Take It!: Britain and the Memory of the Second World War* (Oxford: Routledge, 2014)


Cooper, Alan W, *The Dam Buster Raid: A Reappraisal 70 Years On* (Barnsley: Pen & Sword Aviation, 2013)


Cox, Sebastian, and Peter Gray, eds., *Air Power History: Turning Points from Kitty Hawk to Kosovo* (London: Cass, 2002)


Forczyk, Robert, *We March against England: Operation Sea Lion, 1940-41* (London: Bloomsbury, 2016)


Godson, Roy, ed., *Comparing Foreign Intelligence* (Oxford: Pergamon-Brassey’s, 1988)


Goodman, Michael S., *The Official History of the Joint Intelligence Committee* (Abingdon: Routledge, 2014)


Grehan, John and Martin Mace, *Bomber Harris* (Barnsley: Pen and Sword, 2014)


Hughes, R. Gerald, Peter Jackson and Len Scott, eds., *Exploring Intelligence Archives* (Abingdon: Routledge, 2008)


Jefford, C. G., *RAF Squadrons: A Comprehensive Record of the Movement and Equipment of All RAF Squadrons and Their Antecedents since 1912* (Shrewsbury: Airlife, 2001)


McKinstry, Leo, *Operation Sealion: How Britain Crushed the German War Machine's Dreams of Invasion in 1940* (London: Murray, 2014)


Probert, Henry, Bomber Harris: His Life and Times (London: Green Hill Books, 2001)

Probert, Henry and Sebastian Cox, eds., The Battle Re-Thought: A Symposium on the Battle of Britain (Shrewsbury: Airlife, 1991)

Purdue, A. W., The Second World War (Basingstoke: Palgrave Macmillan, 2011)


Richelson, Jeffrey T. and Desmond Ball, The Ties That Bind: Intelligence Cooperation between the UKUSA Countries, the United Kingdom, the United States of America, Canada, Australia and New Zealand (London: Allen & Unwin, 1985)


Robertson, Ken G., ed., British and American Approaches to Intelligence (Basingstoke: Macmillan, 1987)

Royle, Trevor, Montgomery (New York: Palgrave Macmillan, 2010)


Smith, Michael and Ralph Erskine, eds., *Action This Day: Bletchley Park from the Breaking of the Enigma Code to the Birth of the Modern Computer* (London: Bantam Press, 2001)


Sweetman, John, *Operation Chastise: The Dams Raid, Epic or Myth* (London: Jane's, 1982)


Von Benda-Beckmann, Bas, *German Historians and the Bombing of German Cities* (Amsterdam: Amsterdam University Press, 2015)
Wark, Wesley K., *The Ultimate Enemy: British Intelligence and Nazi Germany, 1933-1939* (London: Tauris, 1985)


**Journals**


Alexander, Martin S., ‘Radio-Intercepts, Reconnaissance and Raids: French Operational Intelligence and Communications in 1940’, *Intelligence and National Security* (hereafter *INS*), 28.3 (2013), 337-376


Andrew, Christopher, ‘Churchill and Intelligence’, *INS*, 3.3 (1988), 181-193


Beesly, Patrick, ‘Convoy PQ 17: A study of intelligence and decision-making’, *INS*, 5.2 (1990), 292-322

Bennett, Ralph, ‘Fortitude, Ultra and the Need to Know’, *INS*, 4.3 (1989), 482-502


Boog, Horst, ‘German Air Intelligence in the Second World War’, *INS*, 5.2 (1990), 350-424


Cerdá, Néstor, ‘The Road to Dunkirk: British Intelligence and the Spanish Civil War’, *War in History*, 13.1 (2006), 42-64


Claasen, Adam, ‘The German Invasion of Norway, 1940: The Operational Intelligence Dimension’, *Journal of Strategic Studies*, 27.1 (2004), 114-135

Cox, Sebastian, ‘A Comparative Analysis of RAF and Luftwaffe Intelligence in the Battle of Britain, 1940’, *INS*, 5.2 (1990), 425-443

De La Marck, David de Young, ‘De Gaulle, Colonel Passy and British Intelligence, 1940-42’, INS, 18.1 (2003), 21-40

Erskine, Ralph, ‘Churchill and the start of the ultra-magic deals’, Intelligence and Counterintelligence, 10.1 (1997), 57-74


Erskine, Ralph and Frode Weierud, ‘Naval Enigma: M4 and Its Rotors’, Cryptologia, 11.4 (1987), 235-244

Fedorowich, Kent, ‘Axis Prisoners of War as a Source for British Military Intelligence, 1939-42’, INS, 14.2 (1999), 156-178


Grey, Christopher, ‘The making of Bletchley Park and Signals Intelligence 1939-42’, INS, 28.6 (2013), 785-807


Grey, Christopher and Andrew Sturdy, ‘The 1942 Reorganization of the GC&CS’, Cryptologia, 32.4 (2008), 311-333
Hamilton, C.I., ‘The Character and Organization of the Admiralty Operational Intelligence Centre during the Second World War’, *War In History*, 7.3 (2000), 295-324


Jackson, Peter, ‘Returning to the fall of France: recent work on the causes and consequences of the ‘Strange Defeat’ of 1940’, *Modern & Contemporary France*, 12.4 (2004), 513-536


Jones, Kevin ‘From the Horse’s Mouth: *Luftwaffe* POWs as Sources for Air Ministry Intelligence during the Battle of Britain’, *INS*, 15.4 (2000), 60-80

Kahn, David, ‘Intelligence in World War II: A Survey’, *Journal of Intelligence History*, 1.1 (2001),1-20


Milner-Barry, P.S., ‘Action This Day: The Letter from Bletchley Park Cryptanalysts to the Prime Minister, 21 October 1941’, *INS*,1.2 (1986), 272-276

Obschonka, Martin and others, ‘Did Strategic Bombing in the Second World War Lead to German Angst?’*, *European Journal of Personality*, 31.3 (2017), 234-257


[Anon] ‘Photographic Reconnaissance in World War II’, *RAFHS Journal*, 10 (1991), 4-75

Puri, Samir, ‘The Role of Intelligence in Deciding the Battle of Britain’, *INS*, 21.3 (2006), 416-439


Robson, Maria, ‘Signals in the Sea: the Value of Ultra Intelligence in the Mediterranean in World War II’, *Journal of Intelligence History*, 13.2 (2014), 176-188

Smith, Christopher, ‘How I Learned to Stop Worrying and Love the Bombe: Machine Research and Development and Bletchley Park’, *History of Science*, 52.2 (2014), 200-222


Thomas, Martin, ‘Signals intelligence and Vichy France, 1940-44: Intelligence in defeat’, *INS*, 14.1 (1999), 176-200


[Anon], ‘The Zimmermann Telegram’, *CIA: Studies in Intelligence*, 57.2 (2013), 71

**Websites**


Medmenham Collection, www.medmenhamcollection.org [accessed 4 December 2018]


**Unpublished Theses**

Cording, Rex Frederick, ‘The Other Bomber Battle: An Examination of the Problems that arose between the Air Staff and the AOC Bomber Command between 1942 and 1945 and their Effects on the Strategic Bomber Offensive’ (unpublished doctoral thesis, University of Canterbury, New Zealand, 2006)


