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RESTRICTED

NOTES ON THE OPERATIONS OF 21 ARMY GROUP

6 June 1944 - 5 May 1945

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THE OPERATIONS OF 21 ARMY GROUP

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3.	1/250,000	Holland and Ruhr.
4.	1/250,000	ANTWERP - Lower Rhine.
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6.	1/2,000,000	Normandy to Baltic.

These notes were compiled in answer to a specific questionnaire, and were not intended to provide a comprehensive record of the campaign.

Additional copies have been prepared as it is felt they may be of general interest and of assistance to those engaged in writing reports connected with the recent operations.

BAOR
1 September 1945

G (Ops)(Records),
HQ British Army of the Rhine.

/RI

THE OPERATIONS OF 21 ARMY GROUP

SECTION 1 THE INITIAL LANDING

A. THE OBJECTIVES AND THE BROAD OUTLINE PLAN

1. The object of the operation was to secure a lodgement on the Continent from which further offensive operations could be developed. The intention of the Command-in-Chief was to assault simultaneously immediately NORTH of the CARENTAN estuary, and between the CARENTAN estuary and the River ORNE, with the object of securing as a base for future operations a lodgement area which would include airfield sites and the port of CHERBOURG.

2. In broad outline the plan was as follows:-

(a) To carry out airborne landings during the night D minus 1/D with one Brit and two US divs in order to protect the flanks of the area in which the assault divs were to land.

(b) To assault on a five-div front with three Brit and two US divs in landing ships and craft.

(c) To land two follow-up divs, one Brit and one US, later on D day and on D plus 1.

(d) Thereafter to build up our forces, in divs

		British	United States
By D plus 4	to	$6\frac{1}{3}$	$8\frac{1}{3}$
By D plus 12	to	9	9
By D plus 20	to	15	9
By D plus 35	to	15	15

NAVAL

3. Prior to the operation, anti E-boat and anti U-boat activities in the Channel and the Bay of Biscay were to be intensified, and certain protective minelaying was to be carried out.

The Assault and Follow-up Forces were to complete their concentration in their assembly stations, which extended from the THAMES to FALMOUTH, by D minus 7. For the sea passage, these forces, accompanied by naval escorts and minesweepers, were to sail from their assembly stations towards a general area SE of the ISLE OF WIGHT. On reaching the enemy mine barrier, minesweepers were to sweep ten passages for the leading groups. Subsequent groups were to follow the same channels which would be marked. About seven miles off shore craft were to deploy for the assault, subsequently adjusting their movements so that the first wave would beach at H hour.

4. The naval fire support plan was based on the neutralisation of selected strong points by all available weapons rather than the weight of fire being spread evenly over the whole length of beaches to be assaulted,

AIR

5. In general, the Air Forces were required to provide:-

(a) Air defence of the bases in the UK and protection of coastal convoys and warships, and of shipping and troop concentrations in the assembly areas.

.../(b)

(b) Strategical bombing, which began some months prior to the operation, and included the treatment of certain specified targets such as coastal defences and batteries, oil installations, etc. These were carefully co-ordinated with other methods of deception in order to mislead the enemy as to the real point of attack.

(c) Protection and support to the actual assault and to the assault forces.

It was regarded as an essential prerequisite of the operation that the fighter forces should attain and maintain an air situation which would ensure freedom of action for our troops without effective interference by the German air force.

TIMING OF THE ASSAULT

6. To ensure that the assault forces arrived on the right beaches, it was decided that the landings would be made in daylight. In order to allow a minimum period of 30 minutes daylight for observed bombardment before H hour, and to enable the maximum number of vehicles to be landed on the first tide, H hour was fixed at about 1½ hours after nautical twilight.

As H hour was related both to nautical twilight and high water, D day was dependent on the phase of the moon. It was decided that D day should be during the full moon period in view of the airborne drop and 5 June was the day selected as affording the desired conditions. Owing to bad weather, it was postponed to 6 June.

MAINTENANCE

7. The port of CHERBOURG was to be used exclusively for the maintenance of the US forces. Maintenance of the Brit forces was to be done through the beaches, and minor ports such as PORT EN BESSIN T78. An essential part of the maintenance project was the construction of two prefabricated ports (code word MULBERRY). Five small havens (GOOSEBERRY) were also to be formed prior to the development of the MULBERRIES to give sheltered water for the discharge of ferry craft. These GOOSEBERRIES were to be formed by sinking ships off the coast.

On shore, maintenance was to be effected by Beach Groups being placed under assault brigades for landing, and being co-ordinated by Beach Sub Area HQs as early as possible. Each Beach Sub area was to establish on D day a Beach Maintenance Area and it was from these BMAs that all the forces ashore were to be maintained for the first dew days. Later, the BMAs were to be merged into Army Roadheads.

B. ENEMY

FORCES AVAILABLE

8. Enemy dispositions in the bridgehead area were five inf divs on the coast, with two inf divs in the CHERBOURG peninsula behind the coast defences. Immediate reserves were 12 SS Pz Div at LISIEUX Q 58 and 21 Pz Div at CAEN U 06.

In BRITTANY there were three para and five inf divs, with another inf div in the CHANNEL ISLANDS.

With the exception of the two divs on the RIGHT, all the above inf divs were controlled by Seventh Army.

.../Altogether

Altogether, the two Army Groups controlled by C-in-C WEST comprised a total of fifty-nine divs, (ten Pz type and forty-nine inf type), of which the main strength lay in the PAS DE CALAIS area.

COAST BATTERIES

9. The greatest weight of fire covered the approaches to CHERBOURG and the entrances to the SEINE. Of the 32 battery positions capable of firing on the assault beaches, 50% were in casemates of reinforced concrete six feet thick.

The approximate distribution of fire power was as follows: -

	Long Range Artillery over 150 mm	Medium Artillery Howitzers	Field Artillery
(a) Capable of firing on the beaches WEST of the CARENTAN estuary	30 guns	22 guns	28 guns
(b) Capable of firing on the beaches EAST of the CARENTAN estuary	6 "	-	12 "
(c) Capable of firing on the beaches between ARROMANCHES T88 and OUISTREHAM U17	12 "	12 guns	12 "
	48	34	52

COAST DEFENCES

10. All beaches were obstructed with underwater obstacles. In February 1944, the enemy began his policy of obstructing beaches with underwater obstacles, starting at high water mark and working towards low water mark, thickening up the obstacles in depth as the months went by. Many obstacles were mined with Tellermines or had shells fixed on to them, whilst there were Tellermines attached to floating rafts. Many of these obstacles were totally submerged at high tide.

11. The enemy defensive system along the Channel Coast, popularly known as the Atlantic Wall, consisted of a strong crust of concrete and field defence works designed to bring the maximum fire power to bear upon beaches suitable for landing operations, and at the same time, to offer to the defender the maximum protection from aerial and sea bombardment. No great defence in depth was developed, the enemy appreciating that any attacking force would so be weakened by the fire power of the coastal defences that it would be ably dealt with by mobile armd reserves located in rear of the beaches.

12. All ports, even minor ones such as PORT EN BESSIN, T 78 and OUISTREHAM U 17 were heavily defended. Elsewhere there was a chain of inf strong points along the coast at approximately 1000 yards intervals and extending inland to a depth of some 200 yards. These were roughly of platoon strength, the largest concentrated at likely exits from suitable beaches which were blocked by anti-tank walls, road blocks, minefields and ditches. They were well supplied with support weapons, medium machine guns, mortars and anti-tank guns, and sometimes included a French 75 mm gun or a German light howitzer.

.../Gaps

Gaps between strongpoints were mined, wired and covered by fire, and where the gaps were too wide, they were flooded if the ground permitted. Wire was used profusely to protect all defensive positions. Use was also made of static flame throwers and demolition vehicles such as Goliaths.

13. Two further enemy defensive measures had to be considered:-

(a) Inundations in rear of suitable beaches. These were most prominent in rear of the beaches in the CARENTAN T 48 area, and in rear of COURSEULLES T 98 in the Brit sector.

(b) The extensive obstructions by the use of stakes, many of which were mined, of all areas suitable for air landing operations.

C. FORMATIONS UNDER COMMAND OF 21 ARMY GROUP AND THEIR ALLOCATION TO TASKS

14. C-in-C 21 Army Group worked in co-operation with Allied Naval Commander Expeditionary Force, and Air Commander-in-Chief Allied Expeditionary Force at a Combined HQ established at PORTSMOUTH.

The military forces under C-in-C 21 Army Group were

Assault Armies	-	First US Army
		Second Brit Army
Follow-up "	-	Third US Army
		First Cdn Army

15. For the assault the Allied Naval Forces were allotted as follows:-

Western Task Force	To First US Army
Eastern Task Force	To Second Brit Army

16. The Tactical Air Forces were allotted as follows:-

Ninth Tactical Air Force (US)	To First US Army
Second " " " (Brit)	To Second Brit Army

In addition, the assaulting forces had the assistance of powerful Allied Air Forces based in the UK. The following table gives approximate figures of the total air forces available:-

Heavy Day Bombers	1400
Heavy Night Bombers	1150
Medium and Light Bombers	830
Day Fighters	2230
Night Fighters	170
Fighter Bombers	560
	6340

FIRST US ARMY

17. First US Army was to assault between VARREVILLE T 4299 and the CARENTAN estuary 4590 (UTAH area), and between VIERVILLE-SUR-MER 6591 and COLLEVILLE-SUR-MER 6888 (OMAHA area). Its tasks in order of priority were:-

.../(a)

(a) To capture CHERBOURG as quickly as possible.

(b) To develop the VIERVILLE-SUR-MER - COLLEVILLE-SUR-MER beachhead Southwards towards ST LO T46 in conformity with the advance of Second Brit Army.

18. VII US Corps was to assault on the RIGHT. Objectives of its formations were as follows:-

(a) Airborne landings, night D minus 1/D.

(i) 82 Airborne Div to land in the area NE of ST MERE EGLISE T 39 to secure the Northern and Western flanks of 101 Airborne Div, to seize ST MERE EGLISE if possible and to destroy bridges over R DOUVES.

(ii) 101 Airborne Div to land in the area of ST MERE EGLISE, to protect the LEFT flank of 4 Inf Div landing from the sea, and to seize CARENTAN. Later it was to join up with V Corps.

(b) Seaborne landings.

4 US Inf Div to land and seize a bridgehead between QUINEVILLE O 30 and ST MARIE DU MONT T49 and to join up with and, if necessary, reinforce the two airborne divs.

19. V US Corps was to assault on the LEFT. The objective for D day was a line from the coast NORTH of ISIGNY T58 to inclusive TREVIERES T68 and VAUCELLES T78. The assault was to be carried out by 1 US Inf Div (less one regimental combat team) with one combat team of 29 US Inf Div under command. 29 US Inf Div (less one regimental combat team) with the remaining combat team of 1 US Inf Div under command, was to land behind 1 US Div and come up on the RIGHT where its own combat team would be found. In addition, two bns of RANGERS under command V US Corps were to land and destroy the coastal defences of POINTE DU HOE T59.

20. Armoured forces to be landed in the assault were two Tank Bns (one DDs) with VII US Corps, and three Tank Bns (two DDs) with V Corps.

SECOND BRIT ARMY

21. Second Brit Army was to assault between PORT EN BESSIN T78 and R ORNE U17. It was to secure and develop a bridgehead SOUTH of the line CAUMONT T76 - CAEN U06 and SE of CAEN in order to secure airfield sites and to protect the flank of First US Army while the latter captured CHERBOURG and the BRITTANY ports.

22. 30 Corps was to assault on the RIGHT. The objective for D day was the town of BAYEUX T77 and the road BAYEUX - CAEN to the inter-corps boundary with 1 Corps. The RIGHT flank of 30 Corps was to be echeloned back NORTH towards the beach at PORT EN BESSIN.

The assault was to be carried out by 50 Inf Div which had an additional inf bde under command. The task of the div was to penetrate the beach defences between LE HAMEL T88 and LA RIVIERE T98 and secure a covering position which would include BAYEUX and the area of ST LEGER T87. The assault was to be made on a two bde front.

PORT EN BESSIN was to be captured by 47 (RM) Commando, who were to land at LE HAMEL.

23. 1 Corps was to assault on the LEFT. Objectives of the formations were as follows:-

.../(a)

(a) Airborne landings, night D minus 1/D.

6 Airborne Div (less one bde) to land EAST of CAEN with the task of seizing the bridges over the ORNE at BENOVILLE U07 and RANVILLE U17. In conjunction with 1 SS Bde, who were landing WEST of the ORNE at H hour, the div was then to seize the coast defences in the FRANCEVILLE U17 - CABOURG U27 area from the rear. They were to dominate the area OUISTREHAM - CABOURG - TROARN U16 - CAEN in order to protect the LEFT flank and prevent interference with the beaches WEST of the ORNE.

(b) Seaborne landings.

(i) 3 Cdn Div to assault on a two bde front at the mouth of the SEULLES T98 river. Task to secure the general line of the BAYEUX - CAEN railway between PUTOT-EN-BESSIN T9172 and the Western outskirts of CAEN.

(ii) 3 Brit Div to assault on a one bde front between LION SUR MER U0681 and OUISTREHAM. Task to secure the high ground NORTH of CAEN and, if possible, CAEN itself; to relieve 6 Airborne Div on the bridges over the CANAL DE CAEN and the R ORNE at BENOUVILLE and RANVILLE.

(iii) 4 SS Bde, with two Commandos, had the tasks of cleaning up the area between 3 Cdn and 3 Brit Divs and of moving inland and seizing bridges over the R SEULLES.

One Commando of 1 SS Bde was to clear the coast on the LEFT of 3 Brit Div up to and including OUISTREHAM, while the rest of the Bde crossed the ORNE to operate with 6 Airborne Div.

24. Armoured forces to be landed in the assault were:-

8 Armd Bde (including two DD Regts)	with 50 Div
2 Cdn Armd Bde (including one DD Regt)	with 3 Cdn Div
27 Armd Bde (including two DD Regts)	with 3 Brit Div

In addition, each Corps had approximately one regt of FLAILS, and one regt of AVREs, with a proportion of CROCODILES.

ASSAULT FIRE PLAN

25. The joint fire plan falls into the following phases:-

Phase 1 Preliminary "softening up" bombardment prior to D day. This was entirely an air commitment. Some 30 bomber attacks were made on coastal batteries in the assault area before D day.

Phase 2 Silencing of hostile batteries during the seaborne approach.
This was a joint naval and air responsibility. The plan included:-

(i) Night D minus 1/D attack on 10 battery positions each by 100 Brit night bombers. 5,300 tons of bombs were dropped.

.../(ii)

(ii) Prior to H hour. Heavy day bombers of US Air Forces on battery positions and defended localities. Over 5,900 tons of bombs were dropped.

(iii) Prior to H hour. Pre-arranged silencing of hostile batteries by 6 battleships, 2 monitors and 22 cruisers.

Phase 3 Close support of the assault troops during the run-in to the beaches and the assault across them.
This was a "free-for-all" period when destroyers, close support naval craft, the Royal Marine Armd Support Group in LCTs, and the self propelled div artillery all engaged pre-arranged or opportunity targets while medium and fighter bombers engaged areas farther inland.
93 destroyers were available for the operation; there was a total of 147 close support craft of various types equipped with guns, mortars, spigot bombs etc.

Phase 4 Support of inf as they worked inland, until their own artillery could come into action ashore.
After completion of primary task of silencing batteries, the battleships, monitors and cruisers were available to bombard opportunity targets as necessary. The more intimate support was to be provided by the Royal Marine Armd Support Group. Equipped with 75mm CENTAUR tanks, there were available 5 batteries, each of 4 troops.

D. OTHER RESOURCES AVAILABLE TO 21 ARMY GROUP

26. The following naval craft were employed in the operation:-

(a) Western and Eastern Task Forces, including Bombardment Squadrons:-

6 Battleships	93 Destroyers
2 Monitors	574 Other Warships
22 Cruisers	312 Minesweepers

(b) Close Support Squadrons:-

147 craft of various types

(c) Landing craft, 4,266.

(d) Merchant ships employed on cross channel service included 400 coasters, 225 liberty ships with a gross registered tonnage of 2½ million tons.

E. SUCCESS ACHIEVED

27. The operations up to the capture of CHERBOURG may be divided into two phases:-

Phase 1 6 to 15 June. The "Break-In". The initial landing and establishment of a firm bridgehead with a continuous front.

Phase 2 16 to 30 June. Development. The cutting of the CHERBOURG Peninsula, capture of CHERBOURG and enlargement of bridgehead SOUTH of BAYEUX.

.../PHASE 1

PHASE 1. 6 June

28. The airborne landings were successful. 82 US Airborne Div landed in approximately the area planned and captured and held ST MERE EGLISE. The roads leading into the beach area were blocked and the Div carried out its task. 101 US Airborne Div was spread over a large area generally in the planned zone, but captured ST MARTIN DE VARRAVILLE T4198 and POUPPEVILLE T4393, and held this ground throughout the day.

6 Airborne Div made a successful landing with comparatively small casualties. The bridges at BENOUVILLE and RANVILLE were seized intact by a coup de main; three bridges over the R DIVES were effectively destroyed. A limited bridgehead was established across the ORNE, and although it was heavily counter-attacked by troops of 21 Panzer Div, it was safely held.

29. The weather was far from ideal for seaborne landings, but in spite of the discomfort and dislocation caused thereby, all the assault divs got ashore, and the coastal defences were broken through in the face of stubborn resistance.

On UTAH beach, 4 US Inf Div made a successful landing aided by 30 DD tanks which were launched about 5,000 yards offshore. By nightfall, it had secured an initial holding some 4,000 yards long, and at one point had penetrated to a depth of nearly 10,000 yards. Contact was established with 101 Airborne Div.

On OMAHA beach a high sea was running, the enemy was in greater strength than was anticipated and casualties were severe. Nevertheless a foothold was gained and a beachhead little more than a mile deep was secured.

30. In the Second Brit Army sector, 50 Inf Div quickly established a beachhead although the village of LE HAMEL was strongly held and was not captured until 1700 hours. Although the final objectives for the day were not taken, by nightfall the forward troops were on the high ground EAST of BAYEUX from VAUX SUR AURE T7884 to BRECY 8878 and contact was made with 3 Cdn Div on the LEFT, though not with the Americans.

31. On the front of 1 Corps the assault went very much according to plan. Although there was much mortaring and shelling of the beaches, on the RIGHT 3 Cdn Div reached its first objective by 1030 hours. The advance continued during the day against heavy opposition from 716 Inf Div. By nightfall, however, the Div had reached a line CREULLY T9080 - BENNY-SUR-MER T9680.

To the LEFT, 3 Brit Div captured OUISTREHAM and advanced inland, coming in contact with inf of 21 Panzer Div. It was counter-attacked in the area of BLEVILLE U0574 but by dark was established on the line PERRIERS-SUR-LE-DAN U0576 - BENOUVILLE where it was in contact with 6 Airborne Div.

Between 3 Cdn and 3 Brit Divs the enemy were still in possession of DOUVRES U0180, and on the extreme LEFT, CABOURG remained in enemy hands.

32. While all the planned objectives had not been captured, and the losses sustained by V US Corps had been heavy, the beach-heads generally were secure and unloading was proceeding in spite of a choppy sea. No serious counter-attacks were received, and the coastal defences were effectively neutralised by the bombing and shelling. The Allied Air Forces flew some 11,000 sorties during the first 24 hours of the operation.

7/15 June

33. In the First US Army sector, VII and V US Corps joined up on 10 June. CARENTAN was captured on 12 June and progress was made further NORTH towards MONTEBOURG 030. On 10 June V Corps began a

.../successful

successful advance SOUTH across the road CARENTAN - BAYEUX. They made contact with 30 Corps on the 11th, quickly cleared the FORET DE CERISY T67 and pressing on through BALLEROY T66, secured CAUMONT T75 on 14 June.

34. On Second Army front enemy tanks were in contact all along the line, but appreciable progress was made everywhere except NE of CAEN. On the RIGHT, BAYEUX was captured on 7 June, and in conformity with the advance of V US Corps, 30 Corps thrust SOUTH on the axis TILLY-SUR-SEULLES 86 - VILLERS BOCAGE 85. Heavy enemy resistance was encountered in the close "bocage" country and TILLY-SUR-SEULLES held out. It was outflanked from the WEST by 7 Armd Div who pushed on to VILLERS BOCAGE but were compelled to withdraw to the high ground NW of the town. 50 Inf Div held a firm base NORTH of TILLY.

On 1 Corps front the enemy was building up his armour, which delivered several counter-attacks EAST and WEST of the ORNE without success. EAST of the ORNE our positions were improved by the capture of BREVILLE U1374 on 13 June by 6 Airborne Div who were now reinforced by 51 Div.

35. By the end of this phase the enemy had committed three panzer, one para and two inf divs in attempts to seal off Allied penetrations.

The First US Army now had six inf, one armd and two airborne divs ashore. In the Brit sector five inf, one armd and one airborne divs had landed.

PHASE 2. 16/30 June

FIRST US ARMY

36. The primary task of First US Army was to capture CHERBOURG, while developing operations SOUTH and SW through the front between ST LO and CAUMONT.

The first step was to cut the CHERBOURG Peninsula and to this end the drive WEST started on 16 June. On this day, ST SAUVEUR LE VICOMTE T19 was captured and by the evening of 17 June, 9 US Inf Div had troops astride the NORTH - SOUTH coastal road in the vicinity of BARNEVILLE SUR MER T09.

On 19 June, VII US Corps advanced on CHERBOURG on a three div front. Moving on a broad front through MONTEBOURG 030, VALOGNES 020 and BRICQUEBEC 010, the Corps closed on the defences of the port. On 22 June the reduction of the fortress started, helped by systematic bombing. The principal redoubt - FORT DE ROULE - was captured on 25th, and two days later the town surrendered. By 30 June, mopping up was completed and the Peninsula WEST of CHERBOURG was cleared.

On 16 June, V US Corps attacked to capture BERIGNY T6065 and the high ground WEST and SOUTH of it. The town was teken, but in spite of renewed attacks the high ground remained in enemy hands. The remainder of the month was spent in reorganisation and improving the positions won, while the main effort was concentrated up in the NORTH.

SECOND BRIT ARMY

37. Operations were directed to the capture of CAEN whereby a strong LEFT flank would be provided for the bridgehead.

Initially it was hoped that CAEN would be captured by a pincer movement. 30 Corps driving SE from TILLY SUR SEULLES was to cross the ORNE NORTH of THURY HARCOURT T94, while the newly arrived 8

.../Corps

Corps crossed the ORNE NORTH of CAEN and drove SW to meet 30 Corps. Owing to lack of room to deploy EAST of the ORNE it was finally decided that 8 Corps should form part of the RIGHT pincer, while 1 Corps carried out a limited operation to secure the LEFT flank of the Army.

38. In pursuance of this general intention, 30 Corps continued its operations around TILLY which was finally captured with HOTTOT on 19 June after some fierce fighting.

Regrouping now took place, and 8 Corps was interposed between 30 and 1 Corps.

39. The plan in outline was:-

30 Corps (49 and 50 Inf Divs 7 Armd Div)	Secure the area NOYERS 86, protect RIGHT flank of 8 Corps and exploit towards AUNAY SUR ODON T85. Operations to start 25 June.
8 Corps (15 and 43 Inf Divs 11 Armd Div)	Break out on front of 3 Cdn Div, force crossings of R ODON and R ORNE and secure high ground NE of BRETTEVILLE SUR LAIZE U05. Operations to start 26 June.
1 Corps	Hold a firm bridgehead EAST of the ORNE near CAEN. Prepare to attack CAEN from the NORTH if opportunity offered. Minor operations to start 23 June.

40. On 25 June, 30 Corps attacked SOUTH across the road CAUMONT - CAEN. 49 Div captured FONTENAY-LE-PESNEL T8767 by nightfall and pushed on along the high ground SE. Attempts to hold BRETTEVILLETTE 8864 were unsuccessful in the face of repeated counter-attacks, but a firm hold was secured on the RAURAY feature about ¾ mile NORTH of the village on 27 June.

On 8 Corps front, 15 Div attacked between LE MESNIL PATRY T8970 and NORREY-EN-BESSIN T9270 on 26 June. There was some very fierce opposition in the close country, but by the following day the div had secured a bridgehead over the ODON NORTH of GAVRUS T9262. The 11 Armd Div was brought up to secure the high ground EVRECY T9259 - ESQUAY T9561 and to seize the R ORNE crossing. On 28 June, it captured the high ground around Pt 112 9562, while the inf divs were engaged in mopping up and widening the corridor across the ODON.

By 29 June, enemy reactions to the 8 Corps thrust had become most violent. Along the front from JUVIGNY T8566 to CAEN, eight panzer divs were concentrated. It was decided that the Corps would concentrate on holding the ground won while further regrouping took place.

On 1 Corps front, 51 Inf Div improved the ORNE bridgehead by securing ST HONORINE U0971 after a stiff fight, while a limited attack by 3 Brit Div NORTH of CAEN on 27 June, met very fierce resistance.

41. By the end of June, both Allied armies were facing SOUTH and the stage was being set for the defeat of the German forces in NORMANDY. He had committed a Panzer Corps brought from RUSSIA, and to compensate for shortage of inf was bringing battle groups from the inf divs in BRITTANY and SOUTH of the LOIRE.

.../The Tactical

The Tactical Air Forces had provided continuous close support to the ground troops when weather conditions permitted, and little was seen of the German Air Force by day. At night, Luftwaffe attempts to bomb the beachhead were generally ineffective.

42. From D Day to 30 June, 274,000 tons of stores and 9,920 'A' vehicles were landed for Second Brit Army.

For 21 Army Group requirements, 570 Liberty ships, 788 Coasters, and 2,899 other vessels arrived in FRANCE between D plus 1 and 30 June.

F. LOSSES INFLICTED ON THE ENEMY UP TO THE CAPTURE OF CHERBOURG

43. In CHERBOURG itself, the enemy lost 39,000 prisoners. In all, on 21 Army Group front it was estimated that his losses in prisoners, killed and long-term wounded amounted to about 90,000 men.

G. CASUALTIES SUSTAINED BY US

44. Brit and Cdn casualties from D day to 30 June:-

	Killed	Wounded	Missing	Total
Brit	2,960	14,299	4,450	21,709
Cdn	396	1,516	1,177	3,089
Total	3,356	15,815	5,627	24,798

SECTION 2 THE BATTLES LEADING UP TO FALAISE AND THE BREAK-OUT

A. GENERAL PLAN OF THE BATTLE

45. The enemy had been strongly reinforced, but his counter attacks up to date, though fierce, had been spasmodic and unco-ordinated. The Allies had gained the initiative from the beginning and there had been no setbacks.

46. The build-up for the break-through was to take place on the RIGHT while the enemy was to batter himself against a strongly held pivot in the CAEN area on the LEFT. In the plan for July, therefore, Second Army was to continue to contain the main enemy force between VILLERS BOCAGE and CAEN and draw to itself its main strength. On the RIGHT, First US Army was to advance SOUTH in the first stage of a move which, it was hoped, would eventually clear BRITTANY and bring it in a position to cut off any withdrawal EAST which was to be forced upon the enemy.

A strong force positioned in the area LE MANS - ALENCON would, it was appreciated, seriously threaten the enemy's concentration in the CAEN area or his retreat should events turn against him.

All the bridges over the SEINE between PARIS and the sea had been destroyed by the Allied Air Forces.

47. Tasks were accordingly allotted to Armies as follows: -

(a) Second Brit Army

(i) To hold the main enemy forces in the area between VILLERS BOCAGE and CAEN.

(ii) To develop operations for the capture of CAEN as soon as possible.

(iii) To be certain of repulsing the expected counter attack with its own resources to enable the operations of First US Army in the WEST to proceed undisturbed. To this end Second Army was to hold 7 Armd Div in Army reserve.

(b) First US Army

To devlop an offensive Southwards starting on 3 July. The initial object of this offensive was to open a gap pivoting on CAUMONT. Through this gap was to pass the remainder of the US forces which would, on the RIGHT, enter and clear the BRITTANY peninsula, and on the LEFT, sweep SOUTH of the "bocage" country to the area LAVAL - MAYENNE - ALENCON - LE MANS.

B. THE ENEMY BUILD-UP

48. By 30 June, the enemy had committed eight Panzer, one PG, one Para plus elements of a second, and nine Infantry Divs, with elements of five more - altogether some twenty-five divs.

The month's fighting had cost him the equivalent of six inf divs. 709 Inf Div was completely written off on the capture of CHERBOURG, while 77, 91, 243, 352 and 716 Inf Divs had suffered crippling losses.

.../C.

C. 21 ARMY GROUP BUILD-UP DOWN TO 25 JULY

49. American — First US Army — Four Corps
Four Armd Divs
Thirteen Inf Divs

Brit and Cdn Armies — Five Corps
Four Armd Divs
Ten Inf Divs
One Airborne Div
Seven Armd Bdes
79 Armd Div

D. SUCCESS ACHIEVED

OPERATIONS UP TO THE BREAK-OUT ON 25 JULY

50. On 3 July, VIII US Corps attacked with three divs directed on LA HAYE DU PUITS T 18. The following day VII US Corps launched an attack with the object of gaining more elbow room in the area SW of CARENTAN. Opposition was very stiff and air support was considerably curtailed through bad weather. Progress was made by both Corps, and XIX US Corps extended the front of attack on 7 July by capturing ST JEAN DE DAYE T 47 on road CARENTAN - ST LO. On 8 July LA HAYE DU PUITS was secured by VIII US Corps, and VII US Corps advanced to within 1000 yards of ST ENY T 37. In continuous fighting further limited advances continued along the front in the next few days and by 14 July the attack had reached a general line from the coast 3 miles NW of LESSAY T 17 to the high ground dominating ST LO, 2 miles NE and EAST of the town.

51. Meanwhile, on 7 July, after an attack by 450 heavy bombers of Bomber Command, 1 Corps attacked NORTH of CAEN with RIGHT 3 Cdn Div, CENTRE 59 Div and LEFT 3 Brit Div. CAEN and CARPIQUET T 96 were captured on 9 July.

On 10 July, 8 Corps attacked SE from the ODON bridgehead with 43 Div. Pt 112 was taken that day and changed hands again frequently in the next two days, but after violent fighting the high ground remained in our hands.

On 30 Corps front limited advances were made in the area SOUTH of TILLY where again the fighting was hard.

52. During this fortnight the enemy was forced to commit his reinforcements piecemeal as they arrived. He moved 2 SS Pz Div to the WEST to hold the Americans but had to split it into small battle groups. Pz LEHR and 21 Pz Divs, whom he hoped to rest, had to be thrown in again after two days' respite to plug holes in the CAEN and ST LO sectors.

53. During the ten days ending 24 July, the advance of First US Army continued gradually and reached the general line of the road LESSAY - PERRIERS T 27 - ST LO, the last named being captured on 18 July.

54. In the Brit sector, 30 Corps attacked SOUTH on 15 July and made some progress towards NOYERS in the face of stiff counter attacks. On the LEFT of 30 Corps, 12 Corps also attacked on 15 July with 15 and 53 Divs, across the ODON towards EVRECY. The enemy made several counter attacks but these were repulsed with heavy casualties.

On the LEFT of the Brit front Second Army launched a powerful armd and inf attack on 18 July, EAST of CAEN. The assault was preceded by an attack by over two thousand heavy and medium bombers of Bomber Command and the US Air Forces, who dropped some 8000 tons on enemy positions. Second Tactical Air Force flew nearly 1400 sorties on the first day of the attack.

.../8 Corps

8 Corps, consisting of Guards, 7 and 11 Armd Divs, passed through the ORNE bridgehead to attack SOUTH astride the high ground traversed by the main road CAEN - FALAISE U 13. 2 Cdn Corps was to clear the built-up area of COLOMBELLES U 06 and make a firm base, while 1 Corps protected the LEFT flank of 8 Corps.

Some very stiff fighting followed throughout the area. The armour made good progress at the outset, but after three days' fighting was finally brought to a halt by a strong anti-tank screen. The CAEN suburbs EAST of the ORNE were cleared and the advance reached the general line ST MARTIN DE FONTENAY U 0260 - BOURGUEBUS U 06 - CAGNY U 1164.

55. On 18 July, the advance of our armour brought 12 SS Pz Div back into the line and drew 1 SS Pz Div in from WEST of the ORNE. Although he had held the armd breakthrough, the enemy suffered considerably in the process. In order to ensure against a further breakthrough SOUTH of CAEN he then brought 9 SS Pz Div, 2 Pz Div and elements of 10 SS Pz Div Eastwards across the ORNE.

This was to have a decisive effect. As a result of three weeks' hard fighting Second Brit Army had achieved its aim. Conditions were now favourable for the "break-out".

OPERATIONS UP TO THE CLOSING OF THE FALAISE POCKET. 25 JULY - 19 AUGUST

56. On 25 July, an American attack preceded by very heavy bombing broke through between PERRIERS and ST LO, and on the same day 2 Cdn Corps attacked simultaneously astride the road CAEN - FALAISE. In the meantime, in the CENTRE, 12 Corps had captured MALTOT T 9862 and made limited progress SOUTH.

These two Brit attacks, strongly contested, undoubtedly helped to pin down German forces which might have been moved to meet the American thrust. This developed with great speed and power, and after COUTANCES T 25 had been captured on 27 July, AVRANCHES T 21 was taken on the 30th and the advance into BRITTANY began.

57. On 23 July, First Cdn Army took over command of 1 Corps, and assumed responsibility for the sector EAST of CAEN. On 31 July, it also took over 2 Cdn Corps.

On 1 August, Twelfth US Army Group became operational and the fifteen divs of First US Army were divided up to make two armies, First and Third.

58. The operations at this juncture had three objects; to capture the BRITTANY ports, to block the line of the LOIRE and the PARIS - ORLEANS gap, and to destroy the retreating German forces WEST of the SEINE. When it became clear that the enemy did not intend immediately to withdraw Eastwards, a further aim was added which was the envelopment of the Seventh Army and Panzer Group WEST in the area SOUTH and EAST of FALAISE.

59. During the first week of August, VIII US Corps moved SOUTH and drove WEST into BRITTANY where the enemy was reduced to withdrawing his forces into the three main ports, BREST, LORIENT and DINARD - ST MALO.

The remaining available divs in the vicinity of AVRANCHES were turned EAST in order to turn the enemy LEFT flank.

60. On 30 July, Second Brit Army began a drive from the CAUMONT area directed first SOUTH, and then EAST to the River ORNE. The reason for changing the axis of advance from the line VILLERS BOCAGE - CAEN was that in the latter area the enemy had concentrated his main power of resistance. LE BENY BOCAGE T 64 and JURQUES 65 were captured on 1 August. The advance continued steadily towards the ORNE between ARGENTAN and THURY HARCOURT, with RIGHT 8 Corps (switched from the Cdn Army sector) on the general line FLERS - ARGENTAN, and 30 Corps CENTRE via the MONT PINCON feature T 84 to THURY HARCOURT. 12 Corps LEFT served as a pivot in the EVRECY area.

.../In the face

In the face of heavy enemy resistance, Second Army had reached the line of the road PUTANGES U 12 - FALAISE by 19 August.

61. First Cdn Army supported these operations with a heavy attack directed on FALAISE astride the main CAEN road. It was launched on 7 August and preceded by a bombing attack by 1,000 heavies of Bomber Command. The advance reached a point some 4 - 5 miles NORTH of FALAISE where it eas halted by an extensive anti-tank screen. The area between the River LAIZE and the ORNE was cleared by a junction on 12 August between the Cdns and 12 Corps who had meanwhile forced a crossing over the latter river.

On 14 August, the attack on FALAISE was resumed and the town was entered on the 16th. The gap between the Brit and Cdn Armies was now only 12 miles wide; further EAST the armd divs of the Cdn Army were closing on CHAMBOIS 32 and TRUN.

62. In the meantime, on 7 August, while the American turning movement on the RIGHT was getting under way, the Germans launched a very heavy counter-attack with five pz and two inf divs against the First US Army, in the vicinity of MORTAIN. This was directed on AVRANCHES with the object of cutting the COTENTIN peninsula.

The attack was held by First US Army, who were supported by every available aircraft of the Tactical Air Forces. 2 TAF alone used 472 Typhoons and claimed 79 tanks destroyed and 51 damaged on the first day.

As soon as it was seen that First US Army could cope with the counter-attack, the Third Army was directed to continue its advance SE on LAVAL and LE MANS. On reaching LE MANS, it was ordered to turn NORTH to capture ARGENTAN and help Second Brit Army to trap the German forces.

On reaching ARGENTAN, the divisions engaged were taken over by V US Corps of First US Army, and Third US Army were released to continue their drive Eastwards to the SEINE VII US Corps now come in on the LEFT of V Corps. and they advanced to the general line CHAMBOIS - TRUN - PUTANGES. On 19 August they met the Cdns and the "pocket" was closed.

As the Second Brit Army advanced into the "pocket" from the WEST, the American formations were gradually pinched out, and First US Army was ordered to attack NE to the SEINE at ELBEUF, about 10 miles SOUTH of ROUEN. Thus, before the "pocket" had been finally cleared up, a second enveloping move was in progress.

In the extreme SOUTH, XII and XX US Corps maintained their sweep towards ORLEANS and CHARTRES.

E. LOSSES INFLICTED ON THE ENEMY

63. With the closing of the FALAISE gap, the number of divs destroyed since D day amounted to fifteen with another four and a half cut off in BRITTANY. Very heavy losses were suffered by another seven divs. In the same period prisoners and killed counted were approximately 240,000, with long term wounded making an estimated total of 400,000.

In the "pocket" itself the following equipment was subsequently checked -

Guns	571
Tanks and SP guns	358
Tracked vehicles, lorries and cars	4,715

.../F. CASUALTIES

F. CASUALTIES SUSTAINED BY US

64.

	From 1 July to 24 August			
	Killed	Wounded	Missing	Total
Allied Contingents	290	1,023	101	1,414
British	9,368	29,998	2,190	41,556
Canadian	2,665	9,525	780	12,970
TOTAL	12,323	40,546	3,071	55,940

	Cumulative from D day			
	Killed	Wounded	Missing	Total
Allied Contingents	290	1,023	101	1,414
British	12,328	44,297	6,640	63,265
Canadian	3,061	11,041	1,957	16,059
TOTAL	15,679	56,361	8,698	80,738

SECTION 3 THE ADVANCE ACROSS THE SEINE, THE ADVANCE TO BRUSSELS AND ANTWERP AND THE CLEARING OF THE CHANNEL PORTS

A. GENERAL PLAN OF THE BATTLE

65. Although large German forces were trapped in the FALAISE pocket on 19 August, they were fighting desperately to break out and had to be mopped up. At the same time, those who managed to avoid encirclement had to be pursued and cut off if they were to be destroyed WEST of the SEINE as was the Commander-in-Chief's intention. Accordingly US XV and XIX Corps were directed to the SEINE at MANTES-GASSICOURT R6060 and ELBEUF R19 respectively. While First Cdn Army blocked the EAST side of the pocket, Second Army were to drive through it to the SEINE.

The American operations took them NE and NORTH across the front of Second Army. It was therefore arranged that as Second Army closed up to the SEINE the Americans would give passage and then withdraw within their original boundary which ran VERNEUIL R03 - DREUX R33 - MANTES-GASSICOURT and was inclusive to Second Army.

66. Starting from the area of DREUX R33 on 18 August, the two US Corps thrust rapidly NORTH. EVREUX R16 was reached on 22 August and ELBEUF on 25 August.

Meanwhile, on 21 August, the British Armies from ARGENTAN to the sea pushed on EAST. By 25 August, they were closing to the SEINE on the RIGHT, while further NORTH they were across the R RISLE Q99. The German forces were being harried to a state of disorganisation while the Second Tactical Air Force did great execution among the improvised ferries and congested bottle necks along the lower SEINE. By 25 August also, the mopping up of the enemy in the "pocket" was virtually completed.

67. From 20 August, the Americans began establishing a bridgehead over the SEINE near MANTES-GASSICOURT. SOUTH of PARIS, which Allied troops entered on 26 August, the SEINE was crossed at MELUN S20 and the YONNE at SENS X66, and the Americans were sweeping on towards TROYES and the R MARNE.

B. FORMATIONS UNDER COMMAND 21 ARMY GROUP AND THEIR ALLOCATION TO TASKS

68. Twelfth Army Group was to revert to direct command of SHAEF on 1 September and was to operate on the RIGHT flank of 21 Army Group directed on the ARDENNES. For the time being, the boundary between the two Army Groups would be BEAUVAIS M90 - DOUAI H60 - ATH J23 - HASSELT K36.

On 26 August orders were issued for 21 Army Group's advance NORTH. The intention was to destroy all enemy in the PAS DE CALAIS and FLANDERS and to capture ANTWERP.

SECOND BRIT ARMY

69. (a) To cross the SEINE on the RIGHT, in the vicinity of VERNON R47 with 30 Corps, and on the LEFT, between LES ANDELYS R39 and LOUVIERS R28 with 12 Corps.

The advance of 30 Corps to the SEINE was led by 11 Armd Div, followed by 50 Div, while 43 Div in reserve was to force the crossing.

The advance of 12 Corps was led by 15 Div who were to make the crossing, followed by 53 Div.

.../(b)

(b) To advance NORTH and establish itself in the area ARRAS H40 - AMIENS N15 - ST POL H11 with all speed and quite irrespective of the progress of the armies on the flanks. AMIENS and the crossings over the SOMME to be captured as quickly as possible.

For this phase, 30 Corps regrouped and the advance was led by RIGHT, Guards Armd Div, and LEFT 11 Armd Div, directed on the SOMME crossings about AMIENS N15. 50 Div followed up and 43 Div held the SEINE bridgehead.

12 Corps, with 4 Armd Bde and later 7 Armd Div in the lead, was directed on an area NW of AMIENS. 53 Div, echeloned back, protected the LEFT flank.

FIRST CDN ARMY

70. (a) To cross the SEINE between PONT DE L'ARCHE R29 and the sea, advance NORTH on the general line ST OMER H15 - BRUGES C80 and capture DIEPPE [illegible].

(b) To secure LE HAVRE L42.

71. 2 Cdn Corps RIGHT with 4 Cdn Armd Div, 3 Cdn Div and later Polish Armd Div to cross the SEINE in the vicinity of ROUEN M21, capture the town and advance NNE to the SOMME between EAST of ABBEVILLE L70 and the sea. 2 Cdn Div to capture DIEPPE.

1 Brit Corps LEFT, to cross the SEINE WEST of ROUEN. 51 Div on the RIGHT to capture ST VALERY-EN-CAUX L96 and then sweep SW along the coast. 49 Div on the LEFT to seize LE HAVRE. If this was not possible, to contain the port while the necessary build-up was made.

72. When it was evident the enemy were in full retreat on Second Army's front, and withdrawing on the LEFT into the Channel Ports to deny us their use, Second Army were ordered to capture BRUSSELS and ANTWERP and to secure a bridgehead over the ALBERT CANAL. The task of clearing the coastal belt was the responsibility of First Cdn Army.

C. SUCCESS ACHIEVED

SECOND BRIT ARMY

73. In Second Army sector, bridgeheads over the SEINE were quickly established at VERNON and EAST of LOUVIERS, the enemy opposition being light as a result of the American sweep through the country along the WEST bank. On the other hand, the concentration of the rest of Second Army for the drive NORTH was inevitably delayed by having to pass across this American thrust.

74. The advance from the 30 Corps bridgehead started on 29 August. Bad weather and some opposition delayed matters this day, but on 31 August, after an all-night advance, 11 Armd Div crossed the SOMME at AMIENS. By nightfall Guards Armd Div further EAST had elements astride the road ALBERT N36 - AMIENS. One bde of 50 Div also reached AMIENS. The Corps had advanced 80 miles.

The advance of 12 Corps started from the 15 Div bridgehead on 30 August and by the evening, 4 Armd Bde had advanced over 30 miles to reach GOURNAY M61, and 53 Div were on their LEFT in the LYONS LA FORET area M40. On 31 August, 7 Armd Div had come up and reached POIX M84, followed by 53 Div who were mopping up enemy pockets by-passed by the armour.

.../75.

75. On 1 September, Guards Armd Div by-passed ARRAS and elements reached DOUAI and LENS H51. On their LEFT, 11 Armd Div reached the road ARRAS - ST POL. 7 Armd Div by-passed enemy resistance at AIRAINES M86 and also crossed the SOMME.

76. In the next three days, the advance continued rapidly. Guards Armd Div, now with the Belgian Bde under command, captured TOURNAI H93 and crossed the ESCAUT on 2 September. The div entered BRUSSELS on the afternoon of 3 September and by last light had control of all main exits. 11 Armd Div by-passed LILLE H63 and after an advance of 60 miles on 3 September, were in the area of ALOST by last light. On 4 September, 11 Armd Div were in ANTWERP and 50 Div reached ALOST. The city of ANTWERP was firmly in our hands but the Northern suburbs adjoining the dock area remained to be cleared.

30 Corps spent the next few days improving their positions in the ANTWERP - MALINES J77 - LOUVAIN J85 - BRUSSELS area.

Meanwhile, 12 Corps had moved on and cleared the ST POL - BETHUNE H52 - LILLE area, and 7 Armd Div captured GHENT J18 on 6 September.

FIRST CDN ARMY

77. 2 Cdn Corps concentrated SOUTH of ELBEUF on 25 August, and the inf bde of 4 Cdn Armd Div gained a bridgehead over the SEINE in the vicinity of the town on 26 August. In the next few days, the rest of the armd div and 3 Cdn Inf Div expanded the bridgehead, while 2 Cdn Inf Div cleared the thickly wooded areas in the loops of the river SOUTH of ROUEN.

On 30 August, the advance from the bridgehead started. ROUEN was found clear of enemy and FLEURY M30 was captured. Progress was rapid. On 31 August, 4 Cdn Armd Div reached the area FORGES M53 - BUCHY M32 and 3 Cdn Inf Div passed through to NEUFCHATEL M44 and EURES M35. By 2 September, 4 Cdn Armd Div were across the SOMME and concentrated EAST of ABBEVILLE M78 and, two days later, 3 Cdn Div were in the BOULOGNE - CALAIS area.

2 Cdn Inf Div liberated DIEPPE on 1 September and the port was quickly put into operation to a limited degree. The div then moved NORTH around 3 Div. The strongly held defences of DUNKIRK were reached on 8 September. These were masked while elements of the Div pushed on up the coast. By 10 September, OSTEND C60 and NIEUPORT H59 had been occupied and patrols were in ZEEBRUGGE C81.

Meanwhile, the Polish Armd Div had crossed the SOMME, and pushed on to the GHENT - BRUGES Canal, which was held in some strength. 4 Cdn Armd Div came up on their LEFT, cleared BRUGES by 11 September and effected a crossing of the Canal. The two armd divs then closed up to the LEOPOLD Canal over which the enemy blew all the bridges and showed he was determined to deny us a crossing. While the Cdn Armd Div contained the enemy on the LEOPOLD Canal, the Polish Armd Div swung EAST and then NORTH. They took over GHENT from 12 Corps, and then proceeded to clear the area up to the SCHELDT estuary between ANTWERP and the small port of TERNEUZEN D21.

78. In 1 Corps sector, 51 and 49 Divs cleared the loops of the SEINE WEST of ROUEN, and got some elements across the river at DUCLAIR M02, CAUDEBEC L92 and QUILLEBEUF L72, but the bulk of the Corps crossed at ELBEUF. On 1 September, the advance started. 51 Div thrust up to ST VALERY-EN-CAUX which was liberated on 3 September. They then turned down the coast to come in on the RIGHT of 49 Div

.../who in the

who in the meantime had been engaged with the enemy outpost positions covering LE HAVRE. By 6 September, the Corps had driven forward up to the main defences of this port, which were formidable.

79. Thus in about ten days the Brit and Cdn Armies had advanced from the SEINE to the Dutch frontier. The coast line was cleared except for LE HAVRE, BOULOGNE and CALAIS which were about to be dealt with, and DUNKIRK which was to be sealed off.

LE HAVRE

80. The garrison of this fortress was about 12,000 men. The defences ran in a semi-circle from a point on the SEINE about 6000 yds EAST of the port, to the Channel coast about 10,000 yds NORTH of the port. There was a flooded valley on the EAST side dominated by high ground, and an extensive anti-tank ditch along the Northern perimeter sited in conjunction with much wire and very extensive minefields. The anti-tank ditch covered a series of strong points which were of reinforced concrete and contained a large number of MGs and 88 mm guns. In the town there were two forts, numerous pill-boxes and fortified buildings and anti-tank guns sited to cover all approaches.

Of guns capable of being used in a ground role there were 108 of 88 mm calibre or over.

81. The defences were softened up by the 15 inch guns of a Naval Bombardment Sqn and by Bomber Command who dropped 4000 tons during the four days preceding the attack in spite of bad weather. In the 90 minutes before H hour, another 4600 tons were dropped.

At 1745 hours 10 September, supported by some 350 guns, one bde of 49 Div breached the minefields and broke into the enemy position in the NE corner of the defences. At midnight, 51 Div on their RIGHT broke in also. Good progress was made. Enemy strong points were taken from the rear, the break through was widened and by dark on 11 September both divs with mobile columns supported by tanks were getting into the town itself and had reached the high ground overlooking the harbour.

The drive continued during the night and at 1145 hours on 12 September the garrison commander surrendered. Mopping up continued in the port area and by nightfall some 12,000 prisoners were taken including 500 wounded found in hospitals.

One of the strongest fortresses of the "Atlantic Wall" was assaulted from the landward side and reduced in 48 hours fighting.

BOULOGNE

82. The garrision consisted of about 9,000 men. The defences ran along an irregular semi-circle of high ground, with a number of features organised as fortresses. In addition to earthworks, the positions contained a considerable number of concrete emplacements, dug-outs etc. All were wired and covered by extensive minefields. Coast defence batteries contained guns up to 305 mm. It is now estimated that there were approximately 90 guns at BOULOGNE of 75 mm calibre or greater.

83. Owing to lack of air support due to bad weather the assault was postponed for two days. It started at 1025 hours on 17 September when two bdes of 3 Cdn Inf Div attacked after the RAF had dropped over 3000 tons of bombs. Artillery support was provided by about 340 guns. Progress was slowed by obstacles and incidents of the ground and the determined efforts of the heavy batteries, including the guns at CAP GRIS NEZ.

.../The forts

The forts were gradually reduced and all resistance in the town was finally crushed by 22 September.

CALAIS

84. This assault was the task of 3 Cdn Inf Div and was delayed by the operations at BOULOGNE. It included the capture of CAP GRIS NEZ and the three-gun cross-channel battery at SANGATTE.

In addition to the fixed defences which were of the same pattern as those encountered at LE HAVRE and BOULOGNE, the Cdns were here confronted with extensive flooding caused by the Germans in the area EAST, SOUTH and SW of CALAIS. As a result, the Div was forced to attack from the WEST of the town.

The attack was launched with two bdes at 0815 hours 25 September supported by a heavy air bombardment. Good progress was made and on 26 September, the high ground SW of the town of ESCALLES G77 was secured. Mines and inundations hampered operations but the Citadel fell and the town was entered on 28 September. An armistice was allowed for the evacuation of civilians from CALAIS and the attack resumed at midday on 30 September. By the same evening all organised resistance had ceased, and mopping up was completed early on the morning of 1 October. CAP GRIS NEZ was captured on 29 September.

85. The British L of C was now well over 350 miles long. Both 8 Corps and 1 Corps were grounded for some days in order to release their vehicles to help maintain the momentum of the drive NORTH. An air lift of approximately 9900 tons had to be made to forward areas between 5 and 30 September, exclusive of air supply on the ARNHEM operation.

Although the LE HAVRE dock installations had been thoroughly wrecked by the enemy, the Brit and US Navies immediately started the task of opening the port, 30 Brit minesweepers being employed. The smaller ports, DIEPPE, BOULOGNE, CALAIS and OSTEND, soon started to operate on a reduced scale, and materially assisted in the maintenance of the Force.

As the coastal belt was cleared, bases for the enemy V weapons in Northern FRANCE and BELGIUM were eliminated or pushed back into HOLLAND and the Dutch islands.

D. LOSSES INFLICTED ON THE ENEMY

86. Although heavy casualties were inflicted on all enemy formations engaged on 21 Army Group front, no specific formation can be said to have been destroyed. Some 67,000 prisoners were taken during the period under review, mostly from the ports of LE HAVRE, CALAIS and BOULOGNE. The fortress of DUNKIRK, with its garrison of 15,000 men, mostly from 226 Inf Div, was isolated.

Approximately 140 tanks and 50 SP guns were destroyed making the total since D Day 950 and 320 respectively.

E. LOSSES SUSTAINED BY US

87.

	From 25 August to 30 September			
	Killed	Wounded	Missing	Total
Allied Contingents	147	422	50	619
British	4,944	12,923	6,245	24,112
Canadian	751	3,802	580	5,133
Total	5,842	17,147	6,875	29,864

.../Cumulative

	Cumulative from D Day			
	Killed	Wounded	Missing	Total
Allied Contingents	437	1,445	151	2,033
British	17,272	57,220	12,885	87,377
Canadian	3,812	14,843	2,537	21,192
Total	21,521	73,508	15,573	110,602

SECTION 4. THE ADVANCE OF SECOND BRITISH ARMY ACROSS EASTERN HOLLAND TO NIJMEGEN AND ARNHEM INCLUDING THE AIRBORNE OPERATIONS.

A. GENERAL SITUATION AND OUTLINE PLAN

88. On 4 September, 30 Corps were in the area ANTWERP - LOUVAIN - BRUSSELS; 12 Corps were clearing the area LILLE - ARRAS - ST POL and 8 Corps were grounded a few miles NORTH of the SEINE.

Twelfth US Army Group were advancing astride the ARDENNES. First Cdn Army were clearing the Channel coast.

89. The intention of 21 Army Group was:-

(a) To advance Eastwards and destroy all enemy forces encountered.

(b) To occupy the RUHR and get astride the communications leading from it into GERMANY and to the sea ports.

The RUHR was to be by-passed round its Northern face and cut off by a Southward thrust through HAMM.

First US Army would assist in cutting off the RUHR by operations against its South-Eastern face if this became necessary.

Until the maintenance situation allowed the employment of First Cdn Army further forward, the main portion of 21 Army Group's task would devolve on Second Brit Army.

90. The first stage of Second Army's operation was to be an advance from the general line of the ALBERT and ESCAUT Canals in BELGIUM to the ZUIDER ZEE. The main body of the Army would then swing EAST while one div, or if necessary a corps, would turn Westwards towards ROTTERDAM and AMSTERDAM.

On 10 September, it was decided that Second Army would be assisted by an Airborne Corps which would come under command on landing.

PRELIMINARY OPERATIONS

91. On 7 September, Guards Armd Div occupied DIEST K 16 and the following day secured a bridgehead over the ALBERT Canal at BEERINGEN K 27 and pushed on to HELCHTEREN K 37 and BOURG-LEOPOLD K 28. In conjunction with 11 Armd Div who had come up on their RIGHT, they advanced to the area PEER K 48 - OVERPELT K 39, and a bridgehead over the MEUSE - ESCAUT Canal was established NORTH of OVERPELT on 11 September. Patrols also reached the canal at BREE K 58 and LANKLAER K 57.

Further WEST, 50 Div established a small bridgehead over the ALBERT Canal SOUTH of GHEEL K 08 on 8 September, and gradually expanded it until relieved by 15 Div. The latter secured a bridgehead over the MEUSE - ESCAUT Canal at AART K 09 on 14 September.

Meanwhile regrouping was taking place. 8 Corps, (11 Armd Div and 3 Div) came up on the RIGHT, 30 Corps (Guards Armd Div, 43 and 50 Divs) was in the CENTRE and 12 Corps (7 Armd Div, 15 Div and 53 Divs) was on the LEFT.

B. ENEMY SITUATION

92. The enemy reaction to the establishment of bridgeheads over the canals had been sharp and there had been a number of counter attacks. The enemy was withdrawing his forces across the SCHELDT Estuary while holding both banks of it, and was bringing troops round NORTH of the

.../ESCAUT Canal

ESCAUT Canal to positions further EAST. He had about twenty-two divs on 21 Army Group Front, including three pz, plus a large assortment of improvised battle groups and static formations.

C. FORMATIONS UNDER COMMAND SECOND ARMY AND THEIR ALLOCATION TO TASKS.

93. The object of Second Army was to position itself astride the rivers MAAS, WAAL and NEDER RIJN in the general area GRAVE E 65 - NIJMEGEN E 76 - ARNHEM E 77 and to dominate the country to the NORTH as far as the ZUIDER ZEE, thereby cutting off communications between GERMANY and the LOW COUNTRIES.

The advance was to be on a very narrow front, with only one road most of the way, through EINDHOVEN E 41 - ST OEDENRODE E 43 - VEGHEL E 43 - UDEN E 54 - GRAVE - NIJMEGEN - ARNHEM - APELDORN Z 70 - ZUIDER ZEE at NUNSPEET Z 62. From the start line to NUNSPEET was 99 miles.

The advance was to be led by 30 Corps in the CENTRE, while 8 Corps on the RIGHT and 12 Corps on the LEFT advanced more slowly on the flanks.

Brit Airborne Corps were to capture and hold crossings over the canals and rivers on Second Army's main axis of advance from about EINDHOVEN to inclusive ARNHEM.

BRITISH AIRBORNE CORPS

94. Tasks of formations were as follows:-

(a)	1 Brit Airborne Div with Polish Para Bde	To capture intact bridges over the NEDER RIJN at ARNHEM with sufficient bridgeheads to pass the formations of Second Army through.
(b)	82 US Airborne Div	To seize and hold the bridges at NIJMEGEN and GRAVE with the same object in view. The capture and retention of the high ground between NIJMEGEN and GROESBEEK E 75 was considered imperative in order to accomplish the Div's task.
(c)	101 US Airborne Div	To seize bridges over the AA River and WILLEMS VAART Canal near VEGHEL, over the DOMMEL River at ST OEDENRODE, over the WILHELMINA Canal near SON E 42, and to capture the town of EINDHOVEN. These tasks were to meet the requirements of 30 Corps.
(d)	52 (L) Div (Airportable)	Was to be flown in NORTH of ARNHEM as soon as airstrips were available and were to concentrate in reserve nearby in accordance with orders to be issued on landing.

The complete fly-in programme called for five lifts from D Day to D plus 3.

It was decided that the airborne operation would be carried out for the first time, in daylight. It was expected that the German night fighter force, which was relatively intact, would be more effective than their day fighters, though flak would be much more accurate by day. It was believed however, that a proper employment of the supporting air forces

.../could knock

could knock out flak positions in advance and beat them down during the airborne operations themselves.

30 CORPS

95. 30 Corps was to advance, when ordered, at maximum speed and to secure the area ARNHEM - NUNSPEET both inclusive. The advance was to be made in the following general order:-

Guards Armd Div
HQ Main 30 Corps
43 Div
50 Div

One main axis (as given in paragraph 93 above) was to be used, with a subsidiary axis for part of the way which was confined to fighting troops only.

96. The tasks given to 30 Corps formations were:-

(a) Guards Armd Div — To advance when ordered by Corps HQ, at maximum speed to area ARNHEM, and by-passing APELDOORN, to dominate the area from inclusive NUNSPEET to exclusive APELDOORN.

If bridges at GRAVE, NIJMEGEN or ARNHEM were destroyed, the Div was to take all appropriate action, in conjunction with the airborne troops, to effect a crossing and facilitate construction of bridges by 43 Div.

(b) 43 Div

(i) To secure area from inclusive APELDOORN due SOUTH along high ground to 1 Airborne Div's bridgehead at ARNHEM.

(ii) To send detachments to secure crossings over R IJSSEL at DEVENTER Z 90 and ZUTPHEN E 99.

(iii) Should bridges over the MAAS, WAAL or NEDER RIJN have been destroyed, be prepared to carry out an assault crossing and bridging operation.

(c) 50 Div

(i) Continue to hold the existing bridgehead over the MEUSE - ESCAUT Canal.

(ii) Thereafter, send detachments to secure a crossing over R IJSSEL at DOESBURG E 98.

(iii) Advance when ordered and secure high ground NORTH of ARNHEM, keeping contact with 1 Airborne Div and relieving 43 Div of part of their responsibility.

(iv) Be available as Corps reserve.

(d) Three groups, each one armd regt, one sqn ROYALS and one fd bty, with tasks as follows, to assist the airborne forces in keeping clear the Corps axis.

(i) 15/19H Group — To keep clear the EINDHOVEN area under operational command 506 RCT of 101 US Airborne Div.

.../(ii) 44 RTR

(ii) 44 RTR Group — To keep clear the VEGHEL area under operational command 501 RCT of 101 US Airborne Div.

(iii) SRY Group — To keep clear the GRAVE area in support of 82 US Airborne Div.

8 CORPS

97. Its task was to protect the RIGHT and rear of 30 Corps and as 30 Corps advanced, progressively to relieve that Corps of RIGHT flank protection.

This was to be accomplished by capturing WEERT K 59 and SOERENDONK E 40, and subsequently extending as far NORTH as HELMOND E 52.

12 CORPS

98. Its role was to continue to operate on the LEFT flank of 30 Corps with the following tasks.

(i) Progressively to relieve 30 Corps of LEFT flank protection by capturing initially RETHY K 19, ARENDONCK E 10 and TURNHOUT E 00.

(ii) Subsequently to advance to R MAAS and possibly beyond.

AIR SUPPORT

99. For the airborne operations fighters provided escorts and withdrawal cover, umbrella cover over the Drop and Landing Zones, and undertook anti-flak patrol. Bombers attacked flak positions.

As soon as the drop was over 83 Group (Second Tactical Air Force) were free to support the breakout of the ground troops. This support was based on a pre-arranged requirement of one sqn RP Typhoons every 5 minutes for 35 minutes, briefed to strafe the road NORTH of the forward troops, to be followed by a cab-rank of RP Typhoons flying over the leading armd elements. In addition, the normal fighter effort was available to keep the sky clear.

100. Two aspects of the operation in particular provided complicated problems.

Firstly, the tactical move of approximately 20,000 vehicles across HOLLAND on one route, supplemented by a subsidiary route. This involved a comprehensive organisation of Regulating HQs and Traffic Control Posts, all equipped with wireless sets, and control in the greatest detail by HQ 30 Corps.

Secondly the bridging problem. Apart from the major water obstacles, there were several sizeable ones to be negotiated before the MAAS was reached. In all there were about 9 000 RE and Pioneer personnel engaged on 30 Corps front. Nearly the whole resources of 21 Army Group Bridge column were assembled at BOURG LEOPOLD . In addition to this equipment on wheels, some 2,000 lorry loads were also dumped at BOURG LEOPOLD.

D. PROGRESS OF THE OPERATION, SUCCESS ACHIEVED AND LOSSES SUSTAINED

17 SEPTEMBER

101. D day for the operation had been fixed for 17 September, subject to the weather being suitable for airborne operations. On the

.../evening 16

evening 16 September, the weather forecast was favourable and at 1900 hours the word was given to lay on the operation.

102. The first blow at enemy defences was struck by Bomber Command on night 16/17 September, when they dropped about 1,200 tons on enemy airfields, and on flak positions along the fly-in route. On the morning of 17 September a further 535 tons were dropped by the RAF and just prior to the arrival of the troop carriers, Eighth US Air Force dropped 3139 tons on 117 flak positions along the routes and near the Drop and Landing Zones.

Between 1025 and 1155 hours on 17 September, the force took off, with a strength of 1544 planes and 478 gliders. Of these, 1481 planes and 425 gliders reached their destination. 20,000 troops were landed, together with 330 artillery weapons, 511 vehicles and over 500 tons of equipment and supplies.

103. 101 US Airborne Div were conveyed accurately and with light losses to their Dropping Zones and Landing Zones. Surprise was complete, ground opposition was light and the Div occupied SON, ST OEDENRODE and VEGHEL. All bridges were held and were intact except that over the WILHELMINA Canal which was blown.

82 US Airborne Div landed successfully and seized intact the MAAS bridge at GRAVE and the bridge at HEUMEN over the MAAS - WAAL Canal. One para regt pushed on into NIJMEGEN but was halted about 400 yards short of the WAAL bridge by very strong opposition.

Dropping Zones and Landing Zones for 1 Airborne Div were 5 to 8 miles WEST of ARNHEM. The landing was generally successful and the area of the Dropping Zones and Landing Zones was secured. 1 Para Bde moved on to the bridges. The railway bridge was found blown, but the main road bridge was intact and 2 Para Bn, with some elements of 3 Bn established themselves at the Northern end. Enemy opposition was stiff.

104. At 1310 hours Commander 30 Corps saw that the airborne drop was proceeding according to plan and Guards Armd Div was ordered to attack at 1435 hours.

By 1500 hours the Dutch frontier was crossed by the leading elements and contact was made with enemy dug in on both sides of the road and supported by a number of SP guns. With close support from RP Typhoons and the artillery, the opposition was overcome and the Div advanced some 7 - 8 miles by nightfall to VALKENSWAARD, about 6 miles short of EINDHOVEN.

Opposition had been a good deal stronger than was expected. Identifications showed that two bns of 6 Para Regt and two bns of 9 SS Div were fighting on the Corps front.

105. On the RIGHT 8 Corps were preparing to bridge the canal with 3 Div EAST of the inter-corps boundary. On the LEFT 12 Corps ordered a night attack, which was successful, and another bridgehead was established across the canal with the object of building a class 9 bridge by morning 18 September.

Both Corps reported that enemy reaction on their fronts had been considerable.

18 SEPTEMBER

106. 30 Corps, led by Guards Armd Div, resumed their advance from VALKENSWAARD at 0600 hours against considerable opposition. Fighting for most of the day centered about AALST E 41 and EINDHOVEN. Attempts

.../were made

were made to operate off the road and to broaden the front, but the ground was unsuitable for tanks and the enemy resistance was strong. The capture of EINDHOVEN from the NORTH by 101 US Airborne Div eventually eased the situation. Contact was established between the two divs about 1700 hours, and the Guards Armd pushed through EINDHOVEN to the Southern bank of the WILHELMINA Canal near SON, where they proceeded to construct a class 40 bridge.

50 Div continued their mopping up operations further SOUTH and maintained their hold on the MEUSE - ESCAUT Canal bridgehead in spite of repeated enemy counter attacks from the NE. In order to relieve 30 Corps of the responsibility for this bridgehead, 50 Div came under operational command of 8 Corps.

107. 101 US Airborne Div consolidated its hold on all the nodal points along the axis up to and excluding the GRAVE bridge.

82 US Airborne Div continued to drive for the NIJMEGEN bridges but an increase in the enemy build-up prevented their capture. The first of a series of counter attacks from the REICHSWALD Forest was made in the morning. It achieved some temporary success and reached the Landing Zone nearest to the Forest, but was eventually repulsed and the area was cleared.

1 Brit Airborne Div held the area of the Dropping Zones and Landing Zones, though they were not able wholly to prevent enemy fire on them. Little further progress was made towards the bridges where troops of 1 Para Bde were being attacked by SS troops supported by Tiger tanks and SP guns. The second (glider) lift of the Div was unfortunately delayed four hours owing to fog over the bases in the UK. This favoured the enemy build-up and when these reinforcements did attempt to break through to the bridges, they were held up at the Western outskirts of the town and their own axis was cut. Thus the Div was in three parts.

During this day, 1360 carrier aircraft and 1203 gliders took off and their losses were very light (22 aircraft and 21 gliders).

108. On the flanks of 30 Corps, 8 Corps established a small bridgehead over the ESCAUT Canal in the LILLE ST HUBERT area K 49. On the LEFT 12 Corps had two Bdes across in their newly-established crossing of the Canal.

19 SEPTEMBER

109. On this day the weather was bad for flying and H hour was postponed to 1500 hours. The aircraft which took off had great difficulty in reaching their objectives and many turned back. Nearly all the resupply for 1 Airborne Div fell into enemy hands, and most of the Polish Para Bde could not take off from the UK. The balance of 82 Airborne Div's glider lift (258 gliders) did not go in at all, and only about 25 per cent of their resupply could reach them. Of 384 gliders for 101 Airborne Div only 212 arrived. Severe flak was also being encountered between the point where the air columns dispersed SOUTH of HERTOGENBOSCH 34, and the Landing and Dropping Zones.

110. At 0615 hours Guards Armd Div started to cross the bridge at SON, and by 0830 hours their leading elements had passed over GRAVE bridge and by 1400 hours the armd bde was concentrated just SOUTH of NIJMEGEN. Here 82 US Airborne Div was having a stiff fight with troops of 9 SS Div. At 1500 hours a combined attack by 82 US Airborne and the Guards was put in to secure the bridges which were reported to be still intact. The enemy had a number of SP guns and concrete pill-boxes around the Southern end of the bridge, and our

.../troops

troops could make little headway. At last light the enemy were still in possession of the bridge.

111. At ARNHEM the situation was obscure and deteriorating. The Div was trying to concentrate all available forces some 3 miles WEST of the road bridge, while at the same time guarding the Landing and Dropping Zones for Polish Para Bde. HQ and one bn of 1 Para Bde still held an area at the Northern end of the bridge but casualties had been heavy, opposition considerable and ammunition and supplies were running short. The two other bns of the Bde, together with one bn from each of 4 Para Bde and 1 Airlanding Bde, made another attempt to establish a corridor through to the bridge, but they failed to break through and very few survivors returned.

112. The rest of 30 Corps and 101 US Airborne Div were still mopping up pockets of enemy resistance in the EINDHOVEN area. The enemy were in fair strength at HELMOND to the EAST of the axis, and at SCHIJNDEL E 43 to the WEST.

On 8 and 12 Corps fronts progress was slow in difficult country which was being stubbornly defended. 11 Armd Div reached LEENDE E 40 and had patrols 3 miles further on at HEEZE. In 12 Corps sector 53 Div attacking NORTH and WEST made slow progress.

20 SEPTEMBER

113. The weather was again bad and only resupply missions could be carried out. These were about 60 per cent successful.

The main considerations affecting operations on this day were to secure the NIJMEGEN bridge, to ward off attacks from the REICHSWALD Forest where the enemy was building-up, and the overriding necessity of relieving 1 Airborne Div.

114. At first light Guards Armoured Div started to clear NIJMEGEN as a step towards securing the bridge, while 504 US Para Regt prepared to make an assault crossing of the R WAAL WEST of the town.

At 1500 hours the assault crossing began. In the face of heavy and close fire, and suffering severe casualties, the US Regt made a small bridgehead and gradually expanded it. They then turned EAST. When the American flag could be seen on the far bank at 1730 hours a small force, including tanks and inf of the GRENADIERS who by then were fighting on the approaches to the road bridge, supported by SP anti-tank guns and REs, rushed the bridge and crossed the 600 yards span to join up with the US para troops. By 2015 hours the position was strengthened and a firm bridgehead established.

115. At ARNHEM the position of the troops at the bridge was now critical. Ammunition had run out and 300 wounded had to be surrendered. The houses from which they were fighting were gradually burnt out by incendiaries. Finally, at 0500 hours on 21 September, they were formed up into small groups and ordered to make their way back if possible to the main body. The remainder of 1 Airborne Div was defending its perimeter, but this had to be gradually contracted as enemy infiltration increased. The hoped-for drop of the Polish Para Bde was again post-poned owing to the weather.

116. 82 US Airborne Div successfully withstood several enemy attacks, fighting in the BEEK area about 3 miles SE of NIJMEGEN bridge being particularly violent.

To the SOUTH 101 US Airborne Div maintained their positions and repulsed an enemy attack at SON. From the HELMOND area the enemy made another attack at 0800 hours with tanks SP guns and infantry,

.../to cut the

to cut the L of C. An organised attack by 501 RCT, assisted by 15/19H, 44 R Tks, SRY and Main HQ 30 Corps, restored the situation at 1100 hours, and the flow of traffic was able to continue.

On the RIGHT flank 8 Corps secured ACHEL K 49 and HAMONT 49 both of which were short of the Dutch frontier. On the LEFT 12 Corps made some progress and reached the road EINDHOVEN - TURNHOUT, but reported stiff opposition from the WEST.

21 to 26 SEPTEMBER

117. During this period the main items were the expansion of the NIJMEGEN bridgehead; enemy activities against the L of C but nevertheless a gradual widening of the corridor; and the unsuccessful attempts to relieve 1 Airborne Div and its eventual withdrawl.

Except on 23 September bad weather severely restricted air operations, and on 22 September no troop carrier operations were possible at all.

118. On 21 September the Guards Armd Div attempted to reach ARNHEM and carry out their original task, while 43 Div came up into the NIJMEGEN bridgehead. Progress however was slow, and the advance was finally halted by a strong anti-tank screen some 600 yards SOUTH of the railway station at BESSEM E 76. The armour was forced to keep to the road which was about 6 feet above the surrounding country and had deep ditches on both sides. Artillery support was strictly limited and air support was reduced owing to the bad flying weather.

ARNHEM itself was now completely controlled by the enemy, and at 1700 hours he captured the ferry at HEVEADORP E 67, thus cutting the last possible link to the SOUTH side of the NEDER RIJN.

At 1700 hours about two-thirds of the Polish Para Bde were dropped in the area NW and NORTH of ELST E 77. Owing to flak, this drop was made a good deal nearer ELST than had been intended and the Bde suffered heavy casualties. There was some delay in concentrating the Bde in the area from which they were to cross to reinforce 1 Airborne Div.

119. On 22 September the attack was renewed by 43 Div, while Guards Armd Div rested and made reconnaissances further to the WEST and to the HERTOGENBOSCH area.

The 43 Div attack was eventually held up outside ELST after some stiff fighting. A mobile column of one bn inf and one sqn tanks made a detour WEST and succeeded in joining up with the Poles at DRIEL 67 and in reaching the NEDER RIJN. As, however, the river bank was under close range fire, and the DUKWS (carrying ammunition, medical supplies etc) could not negotiate the steep banks, only a very small amount of stores could be got over by improvised means.

At 1300 hours the 30 Corps axis was cut between UDEN and VEGHEL with inf and tanks, and at the same time the enemy started shelling ST OEDENRODE. The inf bde of Guards Armd Div was despatched to deal with this threat, and at 1530 hours on 23 September the axis was cleared, though it still remained under shell and small arms fire.

120. On the 23rd, 43 Div slightly strengthened the corridor to the NEDER RIJN but by nightfall had not completely cleared ELST. In the afternoon 353 Glider Inf Regt (82 US Airborne Div) and the balance of Polish Para Bde were landed near GRAVE. During the night 23/24 September about 250 Poles were ferried across the NEDER RIJN and a number succeeded in linking up with 1 Airborne Div. On the following night 4 DORSETS (43 Div) were able to ferry some 350 men across, but the intense

.../fire put

fire put a stop to the proceedings at first light. Contact was made with the enemy but elements of 1 Airborne Div could not be located.

Orders were issued on 23 September that the fly-in of 52 (L) Div was postponed indefinitely.

Fighting continued to be violent in the area of ELST and BEMMEL E 76, the enemy SOUTH of ARNHEM having been reinforced with inf and tanks, and it was not until the late afternoon of 25 September that these localities were completely clear.

Meanwhile the main axis was again cut SOUTH of VEGHEL at 1630 hours on 24 September. In spite of strenuous efforts by 101 US Airborne Div, the enemy built up a considerable force during the night - inf, tanks and SP guns. On 25 September 101 US Airborne Div from the NORTH supported by 44 RTR, in concert with 50 Div from the SOUTH, endeavoured to restore the situation. By dark the enemy had been cleared from all but a small area SOUTH of the road, which was, however, still closed. It was not until 26 September that the area was sufficiently clear for traffic to use the axis.

121. During this period, 8 and 12 Corps had been making progress on the flanks, but they too were up against a stubborn enemy in difficult country. While advances were made on both sides of EINDHOVEN, WEERT was captured on 22 September, and DEURNE E 62 on 24th. By the evening of 25 September, HELMOND and GEMERT were in our hands, and 8 Corps made contact with 30 Corps in the area of ST ANTONIS 73.

On the LEFT flank, 12 Corps slowly cleared the area between the road EINDHOVEN - TURNHOUT and the road EINDHOVEN - HERTOGENBOSCH, and made progress towards SCHIJNDEL, but the enemy was still holding out in BEST 32 and BOXTEL 33.

122. On the morning of 25 September it was decided to withdraw 1 Airborne Div from their positions NORTH of the NEDER RIJN that night. Their bridgehead was no longer tenable owing to casualties and shortage of ammunition and supplies. The necessary reinforcements and supplies could only be provided on a limited scale by night with assault boats etc, and each effort would mean a major operation since the enemy dominated the crossing places from the high ground NE and NW. Moreover, the area in which the Airborne Div was located was not suitable for expansion into a Corps bridgehead.

123. During the night 25/26 September 43 Div carried out the withdrawal operation with assault boats. This was done with the greatest gallantry and skill by all concerned, and by 0600 hours on 26 September, when intense fire made further crossings impossible, 2163 men of the Airborne Div, 160 of Polish Para Bde and 75 of 4 DORSET were safely evacuated. 180 men of the latter Regt were left on the NORTH bank of the river, still fighting to cover the withdrawal. A few of them managed to return the following night.

RESULT

124. There is every reason to suppose that the operation would have been completely successful if the weather been more favourable. The arrival of the Polish Para Bde and 325 Glider Inf RCT (82 US Airborne Div) on D plus 2 as planned might have provided in time the essential extra inf for the tasks at ARNHEM and NIJMEGEN. Moreover, better weather would have permitted adequate air supply, and the normal scale of air support to the ground troops.

Nevertheless, a deep thrust of some 60 miles was made into country occupied and held by a stubborn enemy, five major water obstacles were successfully negotiated in the face of strong opposition

.../and the plan

and the plan as originally conceived was 90 per cent successful.

The posssession of the bridge at GRAVE and of the NIJMEGEN area was to be of considerable importance in the later operations, which were to result in driving the enemy from the WEST bank of the RHINE.

LOSSES

125. The enemy lost 16,000 prisoners and 30 tanks and SP guns destroyed; 159 of his aircraft were also destroyed.

Total casualties of the Airborne Corps were 9,600, of which the Brit element was 6986 including 322 killed.

SECTION 5. THE OPERATIONS TO OPEN ANTWERP AND CLEAR THE LOWER RHINE

A. GENERAL PLAN OF THE BATTLE

126. Towards the end of September in general terms the boundary between Second Brit Army and First Cdn Army was MALINES J 77 - TURNHOUT E 00 - TILBURG E 13 - HERTOGENBOSCH E 34 - UTRECHT E 29. In First Cdn Army a regrouping was taking place. 1 Corps from LE HAVRE crossed over to the RIGHT of the Army sector to SE of ANTWERP, relieving fmns of 12 Corps. The Polish Armd Div, which had been relieved of its responsibilities in the area WEST of ANTWERP on 24 September, joined 1 Corps. In 2 Cdn Corps sector, 2 Cdn Inf Div handed over the investment of DUNKIRK to 4 SS Bde.

127. It can be said that the operations to open ANTWERP started on 1 October. On this date 2 Cdn Inf Div were in process of crossing the ANTWERP - TURNHOUT Canal through the 1 Corps bridgehead about 5 miles WEST of TURNHOUT. The area between the SCHELDT Estuary and TERNEUZEN had been completely cleared. All enemy forces SOUTH of the WEST SCHELDT had been confined in the "island" formed by the SAVOJAARDS PLAAT D 2008, the LEOPOLD Canal and the sea. Here they were being contained by 4 Cdn Armd Div. CALAIS was being finally mopped up by 3 Cdn Inf Div.

128. The plan to open ANTWERP fell into three parts:-

First: To seal off the isthmus leading to SOUTH BEVELAND D 42 and to clear the "island" SOUTH of the SCHELDT.

Second: To clear SOUTH BEVELAND by an advance along the isthmus in conjunction with an assault across the estuary from the SOUTH.

Third: To clear WALCHEREN D 13 by concentric attacks from the EAST, SOUTH and WEST. This involved a second crossing of the estuary and a seaborne expedition from one of the Channel Ports. The fixed and heavy defences of WALCHEREN were to be neutralised by bombing the sea dykes and flooding the island.

While these operations were in progress the RIGHT wing of First Cdn Army would be advancing from the ANTWERP - TURNHOUT Canal across the general line of the road TILBURG - BREDA D 93 - ROOSENDAAL D 73 - BERGEN-OP-ZOOM D 62 to the MAAS.

B. THE ENEMY STRENGTH AND GENERAL LAYOUT IN THE AREA

129. At the beginning of October about nine enemy inf divs were SOUTH of the MAAS, WEST of ARNHEM. Of these, there were four main divisional groups who would have to be dealt with in clearing the SCHELDT Estuary. Two were in the area BREDA - ANTWERP - BERGEN-OP-ZOOM. HOLLAND, SOUTH of the Estuary, was held by 64 Inf Div, which contained a large proportion of experienced troops from the Russian front. SOUTH BEVELAND and WALCHEREN were garrisoned by 70 Inf Div.

Defences around the SCHELDT Estuary.

130. The enemy coastal defence system analogous in nearly all respects to that found along the Channel Coast was designed to prevent access to the mouth of the SCHELDT. Large coastal batteries located on WALCHEREN ISLAND covered the entrances to the SCHELDT, their fire being crossed by heavy and medium batteries situated in the "island" formed by the LEOPOLD Canal.

.../The "ISLAND"

(a) The "ISLAND"

The area was completely flat with a network of minor canals and ditches and numerous areas were flooded. It was criss-crossed by dykes mostly carrying roads and tracks. The fields or polders were open and afforded little cover and the bearing capacity of the soil was poor.

The enemy positions on the far side of the canal were known to be dug in on the reverse side of the canal dyke, difficult to neutralise with HE and SA fire.

In his defensive battle the enemy was materially assisted by the fixed coast defences of BRESKENS D 01, CADZAND C 91 and KNOCKE C 81, and the btys on WALCHEREN Island.

(b) SOUTH BEVELAND and WALCHEREN Island

(i) SOUTH BEVELAND

The greater part of SOUTH BEVELAND is reclaimed land held in position by dykes. Movement is restricted to one main road and the minor approach roads along the dykes SOUTH of the main road. Large areas had already been flooded while the remainder was saturated ground.

There were few fixed defences on SOUTH BEVELAND and the enemy relied largely on inundations, extensive use of mines and cratering to hamper attacking forces.

(ii) WALCHEREN Island

The defences were sited primarily to prevent a seaborne landing from the WEST and to cover the entrance to the WEST SCHELDT. The WEST and SOUTH sides of the island were protected by underwater obstacles, wire and inf positions on the dykes and dunes with gun btys in support behind. FLUSHING had a perimeter defence system including two anti-tank ditches. The strongpoints on the SW coast, similar in design and function to those of the NORMANDY beaches were fairly heavily fortified as far NORTH as WESTKAPELLE, though less heavily fortified than those at FLUSHING. Beaches and dunes and their exits were thoroughly mined. On the island there were 25 active coast btys mounting four or six guns. Calibres ranged from 94 mm to 220 mm, the majority being 150 mm and 105 mm. In addition there were numerous 88 mms and smaller guns sited in strongpoints. The AA defences were heavy.

131. The SCHELDT and its approaches had been extensively mined; the Germans operated a number of explosive motor boats etc, and midget submarines in the area.

C. FORCES EMPLOYED TO CARRY OUT THE TASK

1 CORPS

132. The task of clearing the area between the ANTWERP - TURNHOUT Canal and the MAAS was given to 1 Corps. Initially 1 Corps had 49 and 51 Divs and the Polish Armd Div. 51 Div was transferred to 12 Corps on 17 October when Second Army were developing their operations against HERTOGENBOSCH and TILBURG. 4 Cdn Armd Div and 104 US Div then came into 1 Corps.

.../2 CDN CORPS

2 CDN CORPS

133. Clearing the SCHELDT was the responsibility of 2 Cdn Corps. 2 Cdn Inf Div had the task of sealing off the isthmus and clearing SOUTH BEVELAND. With the assistance of 4 Cdn Armd Div who were to contain the enemy, 3 Cdn Inf Div were to destroy the enemy on the "island" SOUTH of the SCHELDT. 4 SS Bde was to make the seaborne attack on WALCHEREN.

In the course of the operations, certain modifications were made to these plans. 52 Div from the UK joined in the operations SOUTH of the SCHELDT about the middle of October, and 4 Cdn Armd Div then moved round EAST of ANTWERP to operate on the RIGHT of 2 Cdn Inf Div.

AMPHIBIANS

134. In order to cope with the inundations and the saturated ground, and to make corssings of the WEST SCHELDT, a number of amphibians were made available, including some 200 LVTs ("Buffaloes") and M 29Cs ("Weasels"), DUKWs and Terrapins.

ROYAL NAVY

135. The seaborne assault was to be made by Force "T", which consisted of approximately 200 landing and close support craft, supported by a Bombardment Squadron of HMS Warspite and monitors.

D. SUCCESS ACHIEVED

OPERATIONS TO OPEN ANTWERP. SEALING-OFF SOUTH BEVELAND

136. On 1 October the LEFT bde of 2 Cdn Inf Div occupied MERXEM J 79 without opposition, and the RIGHT bde was in BRECHT D 81. The Northern outskirts of ANTWERP up to the Dutch frontier were cleared quickly, but further EAST the enemy made use of the wooded country to delay the advance. By 7 October, however, the area of WOENSDRECHT D 62 was reached; opposition stiffened considerably as the isthmus was approached.

Some days were spent in dealing with paratroops who were dug in among the dykes and railway embankments in the WOENSDRECHT area, while attempts were made to push up along the main road to KORTEVEN D 62. Enemy counter-attacks with inf and tanks were frequent, but the positions generally were held and the enemy was gradually worn down; the isthmus was virtually sealed.

By 20 October, 4 Cdn Armd Div had arrived NE of ANTWERP and began to exert pressure around CALMPTHOUT D 71 and ACHTERBROEK D 71. They pushed on with vigour and on the evening of 23 October crossed the Dutch frontier at ESSCHEN D 72. 2 Cdn Inf Div had meanwhile improved their positions and were ready to advance WEST along the isthmus.

CLEARING THE SOUTH BANK OF THE SCHELDT

137. The plan of 3 Cdn Inf Div was briefly as follows. 7 Bde to establish a bridgehead across the LEOPOLD Canal NORTH of MALDEGEM J 09 through which 8 Bde was to pass. 8 Bde was then to seize crossings over the canals at SLUIS C 90 and RETRANCHEMENT C 91 and clear the KNOCKE area. 9 Bde was to assault across the SAVOJAARDS PLAAT D 2313 on D plus 2 and establish a bridgehead on the EAST of the island from which they were to clear the coast up to BRESKENS D 01.

138. The assault across the LEOPOLD Canal was launched at 0530 hrs on 6 October with two bns after the enemy positions on the far bank had

.../been flamed

been flamed by WASPs. Small shallow bridgeheads were made in the face of fanatical opposition and enfilade fire down the canal from the WEST. It was four days before the bridgehead could be sufficiently expanded to enable the bridges to be built. The enemy reinforced and counter-attacked repeatedly, but it turned out later that in these efforts he had spent a considerable portion of his best troops.

139. 9 Cdn Inf Bde on release from the CALAIS operations, was moved to GHENT to "marry-up" with the LVTs of 5 Assault Regt RE (79 Armd Div). The Assault Group (two bns and Tac Bde HQ) sailed up the GHENT - TERNEUZEN Canal on the evening of 7 October. There was 24 hours' delay at TERNEUZEN owing to trouble at the locks, and the column harboured in the area without being seen by the enemy guns and OPs across the SCHELDT. At 0020 hrs on 9 October, the expedition emerged into the SCHELDT and sailed some 4 or 5 miles to land two hours later on beaches at the Eastern tip of the "island." Surprise was complete and a bridgehead was established without much opposition.

During the day, however, the guns from FLUSHING and BRESKENS opened on the bridgehead and the craft plying across the SAVOJAARDS PLAAT. Enemy reinforcements arrived and counter-attacked, but the hold on the island was slowly extended.

In view of the tough opposition on the LEOPOLD Canal, 8 Cdn Bde were brought round and passed across the SAVOJAARDS PLAAT. 9 Cdn Bde captured the small harbour of HOOFDPLAAT D 11, and BIERVLIET D 11 while 8 Cdn Bde pushed SOUTH and SW to open up a land route at the Southern end of SAVOJAARDS PLAAT in conjunction with 4 Cdn Armd Div. This was effected, after some fierce fighting, on 14 October. The two bdes now fought on from one dyke to another, and on 19th, junction was made with troops from the LEOPOLD Canal bridgehead near ST KRUIS D 00. The enemy was slowly pushed back to the line BRESKENS - SCHOONDIJKE D 01 - OOSTBURG - SLUIS, BRESKENS being finally cleared on 22 October.

It is now necessary to revert to the operations across SOUTH BEVELAND.

SOUTH BEVELAND

140. While 4 Cdn Armd Div attacked towards BERGEN OP ZOOM to secure the RIGHT flank, two bdes of 2 Cdn Inf Div were to attack along the isthmus, secure a crossing over the BEVELAND Canal D 42, and drive WEST to seize the causeway between SOUTH BEVELAND and WALCHEREN. The third bde was to cross the SCHELDT from TERNEUZEN to the vicinity of BAARLAND D 31, and join up with the rest of the Div in the area of GRAVENPOLDER D 32.

52 Div had now arrived from the UK and in view of the stiff fighting which had already taken place at the isthmus, 156 Bde of this Div was given the task of making the SCHELDT crossing.

141. At 0430 hrs on 24 October 2 Cdn Inf Div started the advance into SOUTH BEVELAND. SOUTH of the main road progress was fairly good, but along the road and NORTH of it opposition was very stiff and the advance was further delayed by the wholesale cratering of the road. It is difficult to imagine a more unsuitable piece of country in which to fight a battle. Nevertheless, the Canadians were able to clear the isthmus and on 27 October they reached the BEVELAND Canal, which is about 300 feet wide, and proceeded to bridge it.

142. Meanwhile, 156 Bde of 52 Div had sailed in LVTs from TERNEUZEN at 0245 hrs on 26 October and about 2 hrs later, landed

.../on the

on the selected beaches near BAARLAND after a journey of 8 or 9 miles. There was no opposition on one beach, but the more Northerly one was soon shelled and the craft sustained casualties. Counter-attacks were driven off and the bridgehead expanded, a second bde being ferried across on 28 October. On 29 October a link up was made with 2 Cdn Inf Div who had pushed on from the BEVELAND Canal, and progress was general on the front of both Divs. The Canadians took the Northern route through GOES D 32 and drove for the causeway, while 52 Div moved up on their LEFT through HEERENHOEK D 22. On 30 October, the advance was halted at the EAST end of the causeway by stiff opposition and mines. The next day 4 Cdn Bde cleared this and troops of 5 Cdn Bde then passed through. They were finally held up about 100 yards from the far end of the causeway by heavy mortar fire and a profusion of machine guns sited in the WALCHEREN dykes. The causeway is just wide enough to take the road and the railway; there is no cover.

COMPLETION OF THE OPERATIONS SOUTH OF THE SCHELDT

143. To return to 3 Cdn Inf Div. After the fall of BRESKENS, the enemy opposition began to crack. With two bdes up, the Div swung SW towards the canal at RETRANCHEMENT CADZAND and its heavy guns were captured without opposition, but parties of enemy fought stubbornly along the coast. A crossing of the canal was quickly effected during the night 30/31 October, and by the following evening the reserve bde had pushed on to KNOCKE. During the next three days, mopping up operations continued in the canal areas between ZEEBRUGGE, SLUIS and BRUGES and the operation closed at 0930 hours 3 November having yeilded 12,500 prisoners. Ground conditions had been extremely difficult; for four weeks it had been a hard infantry fight against opposition which the Canadians described as being as stubborn as anything they had met since D Day.

THE CAPTURE OF WALCHEREN

144. Three assaults were to be made on the island:-

(a) From SOUTH BEVELAND. The task of 2 Cdn Inf Div was to make a bridgehead WEST of the causeway. They were then to be relieved by the two bdes of 52 Div whose responsibility would be to clear the SE corner of the island and advance firstly on FLUSHING D 12 and secondly, or alternatively, on MIDDELBURG D 13.

(b) An attack on FLUSHING by No. 4 Commando (4 SS Bde) proceeding direct from BRESKENS in LCA. H hour 0545 hours 1 November.

155 Bde (52 Div) was to be held in reserve at BRESKENS. If the initial assault on FLUSHING was successful, the Bde would immediately follow through. If it failed, the Bde was to move overland to OSTEND and be landed at WESTKAPELLE D 03 to pass through 4 SS Bde.

(c) An attack near WESTKAPELLE by Nos 41, 47 and 48 Commandos of 4 SS Bde, and No 10 (IA) Commando. The primary task of the SS Bde was to secure the dune area from WESTKEPELLE to FLUSHING and destroy all batteries therein. The secondary task was a similar one in the area WESTKAPELLE - DOMBURG D 03.

As it was essential from a Naval point of view to touch down as soon after low water as possible H hour was 0945 hours 1 November.

145. The main preliminary operation was the bombing by the RAF of the WESTKAPELLE and other sea dykes, whereby the island would be

.../flooded.

flooded. The WESTKAPELLE dyke was 330 feet wide at its base and 30 feet high above low water level. If a breach of 300 yards could be made in it, the enemy positions could be taken in rear by waterborne forces.

During October the RAF breached the dykes at four points, NE of VEERE 13, both EAST and WEST of FLUSHING and at the Southern end of the WESTKAPELLE dyke. This last breach was 380 yards wide.

As a result, by 1 November, the greater part of the island was below water except for FLUSHING and MIDDELBURG, a narrow belt of dunes along the Northern, Western and Southern sides, and a larger area in the SE corner. About half the batteries were made untenable.

WALCHEREN. 1 NOVEMBER

146. At the causeway, a Cdn bn made 400 - 500 yards progress but was forced back to the WEST end after some fierce fighting.

At FLUSHING, 4 Commando made a successful landing and reached the water front without heavy casualties. They were quickly followed by the leading troops of 155 Bde, and together they pushed on into the town. The chief opposition came from strong points and pill boxes on the flanks of their beachhead. The build-up proceeded satisfactorily during the day, though 11 LCAs and LVTs were sunk or damaged by gun fire and mines.

147. The force to attack WESTKAPELLE left OSTEND on 31 October. The passage was uneventful. The close support squadron of 25 vessels was in the lead, and was timed to arrive one mile off shore at H minus 20 minutes, with the leading groups of landing craft close astern.

Firing from the shore was first observed at 0715 hours when the DOMBURG batteries opened on the FLUSHING assault. At 0820 hours, the bombardment squadron - HMS WARSPITE and the monitors ROBERTS and EREBUS - opened fire. Shortly before 0900 hours, the close support squadron deployed, and at 0900 hours battle was joined. By this time, the squadron was being engaged by practically all the hostile batteries (about 9) from NORTH of WESTKAPELLE to FLUSHING.

148. The weather in UK severely restricted flying operations and the pre-H hour fighter/bomber and heavy bomber attacks could not take place. The "cabrank" RP Typhoons of Second Tactical Air Force from the Continent appeared on time and pressed home a determined attack just as the assault troops were about to land. This undoubtedly had a profound effect on the operation at a time when the support squadron was suffering severe casualties from the still active batteries.

The shooting of the Bombardment Squadron was also handicapped as their spotting planes could not take off from the UK. Air observation posts from the Continent eventually took their place.

149. The leading troops touched down at 0957 hours at the gap in the dyke and the remaining landing craft were successfully beached and unloaded by 1230 hours. 48 Commando on the RIGHT captured a strong point SOUTH of the gap, and by evening had made about 2 miles progress towards ZOUTELANDE D 03 eliminating battery W 13 on the way after a stiff fight.

On the LEFT, 41 Commando negotiated the gap in their LVTs, dismounted and captured WESTKAPELLE village and, after being ordered to halt for a while to await results further SOUTH, were given permission at 1500 hours to push on to DOMBURG. Having established a firm base at WESTKAPELLE they advanced to DOMBURG by dark, capturing two batteries en route.

.../47 Commando

47 Commando landed about midday, and after some delay in negotiating the gap in the face of very heavy fire, they were assembled for the night about half a mile to the SOUTH.

150. The landing had been successful. It was due in no small measure to the determination of the Close Support Squadron to ensure that the Commandos should arrive safely on the beach and receive the maximum support. The Squadron engaged and drew to themselves the fire of the enemy batteries; in some cases at point blank range. In the first four hours, the Squadron lost 11 of its 25 craft by gunfire, and another 3 on mines.

WALCHEREN. 2 - 8 NOVEMBER

151. At the causeway, 52 Div took over from 2 Cdn Inf Div who were withdrawn into reserve. Further progress here was severely limited by well-sited strongpoints and to ease the situation another assault was made across the SLOOE Channel about 2 miles to the SOUTH. This took place on the night 2/3 November and was successful. The first 400 yards was made in assault boats, after which the troops struggled across the salt marsh for about three-quarters of a mile, well over their waists in liquid mud. More troops crossed in the same way the next night, and by the evening of 4 November, in spite of fairly heavy opposition, a link-up was made with the troops at the causeway. Progress was then made NORTH towards VEERE and SOUTH towards FT RAMMEKI D 12.

152. At FLUSHING, 4 Commando and 155 Bde steadily mopped up the town against concrete strong points and suicide squads who established themselves in the cranes and gantries of the dock area. With the assistance of some mountain guns which were assembled in the upper floors of houses and mortar barrages from the roofs of buildings the town was cleared by the evening of 3 November.

153. On 2 November, 4 SS Bde pushed on past ZOUTELANDE and after some fierce fighting for the enemy battery W 11, a junction was made the next day with the force at FLUSHING.

In the NORTH, the enemy fought back strongly in the dunes and woods NE of DOMBURG where mines and wire were widespread. With the assistance of two gun tanks and two AVREs, the sole survivors of about twenty which had attempted to land at WESTKAPELLE on D Day, the Commandos gradually mopped up towards VROUWENPOLDER D 1438.

154. Resistance was now almost at an end. On the afternoon of 6 November, a "left-flanking" attack in LVTs from FLUSHING across the inundations was made on MIDDELBURG, and the German Commander was captured. With the aid of the amphibians, the rest of the island was cleared and on the 8 November the operation ceased, some 8,000 prisoners having been collected on WALCHEREN.

ANTWERP

155. On 4 November the first minesweepers reached ANTWERP. One of the most intricate sweeping operations of the war now had to be carried out. 100 minesweepers were employed clearing the 70 mile long channel, which had to be swept 16 times. 406 mines were accounted for. On 28 November a convoy of 18 ships reached ANTWERP safely.

OPERATIONS TO CLEAR THE LOWER RHINE

156. When the withdrawal of 1 Airborne Div from ARNHEM had been effected on 26 September 30 Corps was concerned with exapnding the NIJMEGEN bridgehead and keeping open the corridor, while 8 Corps on the RIGHT and 12 Corps on the LEFT came up on the flanks.

.../30 Corps

30 Corps gradually expanded WEST between the NEDER RIJN and the WAAL, and SW across the MAAS towards HERTOGENBOSCH to link up with 12 Corps which was directed on SCHIJNDEL.

Further WEST, 1 Corps of First Cdn Army was moving towards the line TILBURG - BERGEN OP ZOOM.

157. WEST of ARNHEM, the position was gradually improved and the enemy, despite repeated counter attacks, was pushed across the NEDER RIJN to just short of WAGENINGEN E 57 whence the line ran generally SSW to a point about 4 miles EAST of HERTOGENBOSCH.

Meanwhile, the boundary between Second British and First Cdn Armies was temporarily moved further WEST and 12 Corps was directed on the MAAS through the general area HERTOGENBOSCH - TILBURG - OOSTERHOUT E 04.

158. On 22 October, 12 Corps launched an attack EAST of HERTOGENBOSCH with RIGHT 53 Div and LEFT 7 Armd Div, while at midnight 51 Div attacked EAST of SCHIJNDEL. Although conditions were difficult owing to extensive flooding in some areas, progress was good. HERTOGENBOSCH was cleared by 53 Div on 27 October, and the following day 15 Div on the extreme LEFT of the Corps, secured TILBURG. 51 Div and 7 Armd Div then continued the sweep towards the MAAS and cleared the country as far WEST as OOSTERHOUT and GEERTRUIDENBURG 04, the latter remaining in enemy hands for the time being.

159. In the Cdn Army sector, early in October 49 Div and Polish Armd Div of 1 Corps, made progress NORTH of TURNHOUT to within 4 miles of TILBURG on the RIGHT and to ALPHEN 02 on the LEFT. A pause then occurred while 4 Cdn Armd Div arrived from WEST of ANTWERP. On 20 October, 1 Corps launched an attack to clear the RIGHT flank of 2 Cdn Inf Div (attacking towards SOUTH BEVELAND isthmus). Progress was steady through the thickly wooded country. BREDA was captured by the Poles on 29 October, and 4 Cdn Armd Div secured BERGEN OP ZOOM the same day. ROOSENDAAL and OUDGASTEL D 73 were cleared by 49 Div on 30 October. Meanwhile, 104 US Inf Div came under 1 Corps, and positioned between Polish Armd Div and 49 Div, joined in the sweep up to the MAAS. On 8 November MOERDIJK 84 where the enemy had blown the bridge, was finally cleared by the Polish Armd Div, and the SOUTH of the MAAS, including the island of THOLEN and the ST PHILIPSLAND Peninsula D54 was completely in our hands.

E. LOSSES INFLICTED ON THE ENEMY

160. The German 64 Inf Div was destroyed SOUTH of the SCHELDT and 70 Inf Div on WALCHEREN. The scattered remnants of nine divs were driven across the MAAS and the WAAL, yielding 54,000 prisoners.

F. CASUALTIES SUSTAINED BY US

161.

	From 1 October to 10 November			
	Killed	Wounded	Missing	Total
Allied Contingents	566	1,911	199	2,676
British	2,977	9,894	3,229	16,100
Canadian	3,089	6,096	-298	8,887
TOTAL	6,632	17,901	3,130	27,663

	Cumulative from D Day			
	Killed	Wounded	Missing	Total
Allied Contingents	1,003	3,356	350	4,709
British	20,249	67,114	16,114	103,477
Canadian	6,901	20,939	2,239	30,079
TOTAL	28,153	91,409	18,703	138,265

SECTION 6 OPERATIONS FOR THE DESTRUCTION OF THE ENEMY WEST OF THE RHINE

A. GENERAL PLAN OF THE BATTLE

162. The destruction of the enemy WEST of the RHINE on the front of 21 Army Group had two phases :-

First Preliminary operations to clear up to the R MAAS and the R ROER and activity along the river line in HOLLAND.

Second Operations to clear the area between the MAAS and the RHINE.

FIRST PHASE. OCTOBER 1944 - JANUARY 1945.

163. This followed on from the ARNHEM operation at the end of September, when, in the NORTH, a bridgehead had been established in the area GRAVE - NIJMEGEN and, in the SOUTH, First US Army were across the MEUSE in the area MAASTRICHT - AACHEN.

Subsequent operations may be summarized as follows :-

(a) During October, 8 Corps, with 7 US Armd Div under command, captured VENRAIJ E72 and reached the MAAS Northwards from BOXMEER 74. They repulsed a counter attack by three enemy divs in the MEIJEL area 70.

(b) In November, 12 Corps handed over their sector on the Lower MAAS to 1 Corps and came across to come in on the RIGHT of 8 Corps, followed shortly afterwards by 30 Corps who had been relieved at NIJMEGEN by 2 Cdn Corps. 30 Corps moved further SOUTH to the area of SITTARD K66, near the 21 Army Group/Twelfth US Army Group boundary.

(c) HQ Airborne Corps had returned to the UK on 9 October, but 82 and 101 US Airborne Divs remained under Second Army in the NIJMEGEN area, taking part in some very stiff fighting. They were eventually relieved when 2 Cdn Corps took over. 82 Div were released to Twelfth US Army Group on 12 November; 101 Div on 27 November.

(d) While 8 Corps steadily pushed the enemy across the DEURNE Canal towards VENLO, 12 Corps attacked on 14 November from EAST of WEERT towards ROERMOND K79. On 19 November, 30 Corps with 84 US Inf Div under command, attacked towards GEILENKIRCHEN K86.
By early December, the enemy had been cleared from the whole WEST bank of the MAAS as far SOUTH as MAESEYCK K67. From this point our line crossed the river and ran just NORTH of SITTARD to inclusive GEILENKIRCHEN.

(e) On 13 December regrouping started for the second phase. This operation was to be carried out initially by 30 Corps who were to attack SE from the NIJMEGEN area.

12 Corps took over in the SOUTH and HQ 30 Corps moved to BOXTEL E33.

164. (a) The German offensive in the ARDENNES

On 16 December, Von RUNDSTEDT launched his ARDENNES offensive against First US Army. On 20 December, the US First and Ninth Armies came under operational control of 21 Army Group.

30 Corps, consisting of 43, 51 and 53 Inf Divs and Guards Armd Div, was concentrated in the general area LOUVAIN - HASSELT. Later, 43 Div was replaced by 6 Airborne Div and transferred to 12 Corps.

.../On the RIGHT

On the RIGHT of First US Army, 30 Corps operated on the Northern and Western flanks of the ARDENNES salient. When the Allied counter offensive started on 3 January, the Corps advanced from the line of the road MARCHE - HOTTOT on LAROCHE capturing some 700 prisoners., As the salient was gradually eliminated, 30 Corps was pinched out, and on 14 January, Corps HQ proceeded to BOXTEL to resume its preparation for its original operations.

On 18 January, First US Army reverted to command Twelfth US Army Group, having taken 20,000 prisoners in the operation up to date.

(b) During the first week of December, the enemy blew a flood bank SW of ARNHEM. Large areas were flooded and this finally decided the issue that the main effort of 21 Army Group would be made Eastwards across the RHINE rather than Northwards across the R LEK.

165. Meanwhile, on 16 January, 12 Corps with 7 Armd Div, 43 and 52 Divs, attacked NORTH from the road GEILENKIRCHEN - SITTARD. The object was to clear the area between the R ROER and the MAAS so that it would serve as a base from which to develop further operations in conjunction with the attack from NIJMEGEN.

The operation was carried out under conditions of hard frosts, sudden thaws and thick fog. In ten days the area SOUTH of the ROER was cleared except for a small bridgehead SW of ROERMOND. Altogether this offensive cost the enemy some 3000 Prisoners of War and about the same number killed and long-term wounded.

43 Div then moved to Cdn Army sector. On 6 February, XVI US Corps of Ninth US Army became operational and took over the whole of 12 Corps area.

SECOND PHASE. FEBRUARY - MARCH 1945

166. The plan was as follows :-

(a) Operation VERITABLE

First Cdn Army, reinforced by 30 Corps, was to attack from the general line MOOK E75 - NIJMEGEN to destroy the enemy between the MAAS and the RHINE, and to break through in a Southerly direction between these two rivers.

(b) Operation GRENADE

At the outset, Ninth US Army was to hold its front on the R ROER from JULICH F05 NW to ROERMOND. At a date to be fixed by Commander-in-Chief 21 Army Group, it would develop an offensive across the ROER in conjunction with the Cdn Army operation.

(c) Second Brit Army in the CENTRE was to hold the WEST bank of the MAAS from ROERMOND Northwards to CUIJK 74, and be prepared to operate on the RIGHT of First Cdn Army at a later date.

When these operations were completed, 21 Army Group would be poised ready for the next phase, with a front formed along a length of the RHINE.

B. FORCES EMPLOYED AND TASKS ALLOTTED.

167. (a) Initially, First Cdn Army was to attack on a one Corps front with 30 Corps. Subsequently, 2 Cdn Corps, while still holding NIJMEGEN and the WAAL bridgehead, would take over the LEFT sector and the attack would proceed on a two-corps front. 1 Corps, to the WEST, would continue to hold its 125 mile front along the MAAS.

(b) 30 Corps was to attack with five inf divs up, as under:-

.../From RIGHT

From RIGHT to LEFT - 51 Div
53 Div
15 Div
2 Cdn Div
3 Cdn Div

RESERVE and FOLLOW UP - 43 Div
Guards Armd Div

In addition, the Corps included three independent armd bdes, eleven regts of 79 Armd Div grouped under one Bde HQ and five AGsRA. The total guns to be employed for the attack was over 1000.

All the resources of Second Tactical Air Force were made available to support the operation, in addition to heavies of IX US Bombardment Division and Bomber Command.

168. The respective attacks by the Divs on D Day were as follows :-

51 Div — To capture the high ground near the SW corner of the REICHSWALD FOREST.

53 Div — To seize the high ground on the Northern edge of the REICHSWALD.

15 Div — To attack straight through to KRANENBURG E85 and then to the high ground overlooking CLEVE E85.

2 Cdn Div — To capture WYLER E75.

3 Cdn Div — Late afternoon D Day to drive EAST across the marshy ground to the CLEVE - ALTER RHINE Canal.

D Day was 8 February; H hour 1030 hours except for 3 Cdn Div.

169. Exploitation. When 15 Div had captured CLEVE, its task was to send mobile columns to capture UDEM 94 and CALCAR A05 and to clear the road CLEVE - EMMERICH E96 as far as the RHINE.

43 Div was to pass through 15 Div on D plus 1 to attack SOUTH to GOCH E94. 53 Div was to clear the REICHSWALD. 51 Div, using the good road SOUTH of the forest, was to converge on GOCH with 43 Div. Guards Armd Div was to follow 43 Div to seize and hold the high ground NORTH of SONSBECK A03 and push forward a strong mobile column to capture WESEL bridge if it was still intact.

C. ENEMY DIVISIONS AND STRENGTH IN THE AREA

170. The enemy forward positions at the REICHSWALD were held by 84 Inf Div reinforced by a three-battalion battle group, a para regt and some police battalions. Further back in the area were 180 and 190 Inf Divs. Reinforcements finally engaged were 1, 6, 7 and 8 Para Divs, Pz LEHR and 116 Pz Divs and 15 PG Div.

When Ninth US Army attacked from the SOUTH, they were opposed by five other inf divs which were reinforced by one inf div and 11 Pz Div.

171. In the NORTH, the defences were roughly in three main zones; the forward positions covering the REICHSWALD; the SIEGFRIED Line about 3 kilometres further EAST at its nearest point and the "lay-back" position running in front of the HOCHWALD Forest which continued down to the R ROER.

.../There were

There were innumerable trench systems, switch lines and loops with anti-tank ditches linking the large wooded areas and the natural drainage systems. All towns and villages were transformed into strong points.

Along the line of the R MAAS itself, an extensive trench system was developed, the chief concentrations being at suitable crossing places and ferry sites. The towns of VENLO and ROERMOND were heavily defended.

172. An estimate compiled from order of battle sources showed that against the First Cdn Army the enemy eventually had available 717 8 to 30 cm mortars, and 1054 guns of various calibres.

D. SUCCESS ACHIEVED

173. The attack went in at 1030 hours on 8 February. Artillery support was excellent, but the weather interfered considerably with the bombing programme and close air support. Surprise was gained and by midnight all objectives ordered for the day had been attained; opposition was stiffest on the RIGHT, in front of 51 Div where local reserves were readily available.

On 9 February, progress was steady, though somewhat less on the RIGHT. 15 Div on the LEFT pierced the SIEGFRIED defences at NUTTERDEN E85 and by nightfall were in the outskirts of CLEVE. Late in the evening 43 Div started to pass through. NORTH of the main road CLEVE - NIJMEGEN, 3 Cdn Div were carrying out successful amphibious operations.

174. Flooding, however, was rapidly becoming a serious handicap to the operation. The RHINE, MAAS and WAAL had risen above the recognised danger mark and the water was approaching the main road near KRANENBURG. As a result of the past experiences of the Dutch, it was decided to blow certain dykes NE of NIJMEGEN. This was done and about two million gallons an hour poured away through the breaches. The Germans, however, countered by blowing the dykes on the ALTER RHINE some 8 miles to the EAST, and let in about the same quantity of water.

In the SOUTH, the valley of the ROER was also flooded, and it was apparent the American attack would have to be postponed.

On 12 February, there were two feet of water across the main road for a length of about 5 miles near KRANENBURG. Alternative routes had to be found; these were mostly across saturated ground, and considerable traffic congestion occurred.

175. Enemy opposition increased as reinforcements arrived, and a total of nine divs were identified on the front in the first five days. Due, however, to the interdiction programme, these were committed piecemeal.

By 13 February, the SIEGFRIED Line had been breached and the REICHSWALD completely cleared. The RIGHT flank of 30 Corps was on the MAAS about 3 miles SOUTH of GENNEP E74 where the construction of a bridge was started. On the LEFT, the waterborne activities of the Cdns had brought them opposite EMMERICH.

During the next nine days, the front was extended SOUTH and EAST of the REICHSWALD. GOCH was captured and operations developed against CALCAR.

176. On 23 February, Ninth US Army launched their operation across the ROER, with XIX US Corps on the RIGHT and XIII US Corps on the LEFT. The attack was directed NE and NORTH towards

.../DUSSELDORF

DUSSELDORF and MUNCHEN GLADBACH F08 and aimed to link up with First Cdn Army.

Twelve hours after the assault crossing, there were sixteen bns across the ROER and in spite of difficulties with the swollen river, by early morning 24 February, six class 40 treadway bridges and several inf bridges had been erected. In three days a bridgehead about 16 miles wide and 6 - 8 miles deep had been established, and XVI US Corps came in on the LEFT.

177. Meanwhile in the NORTH, regrouping had been going on for an operation to be carried out by 2 Cdn Corps who had become responsible for the LEFT sector from 15 February. The intention of this operation (BLOCKBUSTER) was to break through the enemy defences between UDEM and CALCAR, smash the HOCHWALD Line and exploit to XANTEN.

30 Corps was to swing round on the RIGHT of 2 Cdn Corps.

178. Some fresh formations had now come into the battle area, namely 4 Cdn Armd Div and 2 Cdn Armd Bde from WEST of ARNHEM, and 11 Armd Div, 3 Brit and 52 Divs from Second Brit Army's front.

The regrouping resulted in 30 Corps having one armd Div, five inf divs and three independent armd bdes, while 2 Cdn Corps had two armd divs, three inf divs and one independent armd bde. A corresponding redistribution of the regts of 79 Armd Div also took place.

179. Further SOUTH, Ninth US Army extended its front along the WEST bank of the MAAS up to VENLO and the following US formations came under command Second Brit Army.

95 US Inf Div from 14 to 22 February.
75 US Inf Div from 21 February to 2 March.

180. The operations started at 0430 hours on 26 February against a number of para divs who fought desperately. A large number of tanks were bogged down in the heavy ground, but the two armd divs pushed on through the night 26/27 February and the HOCHWALD was penetrated on 27 February. That night again the advance continued and a gap was made between the HOCHWALD Forest and the BALBERGER Forest near the railway line, A 0441.

As soon as this attack got under way, opposition on 30 Corps front showed signs of loosening. On the RIGHT, 52 Div who now had 1 Commando Bde from Second Brit Army under command, pushed on along the MAAS for about 8 miles and reached WELL E82. In the CENTRE, 53 Div captured WEEZE E93 and with 3 Brit Div on their LEFT, pushed along the road through KEVELAER E93 to GELDERN A 02, where they linked up with Ninth US Army on 3 March.

181. The advance of the Americans had been rapid. On 27 February, the three Corps advance had broken through the enemy main line of defences. XIX Corps on the RIGHT, were in MUNCHEN GLADBACH on 1 March and captured NEUSS F28 the next day. At the same time, ROERMOND and VENLO were secured.

.../182.

182. The operation now entered its last phase. Although his Paratroops fought on stubbornly, the enemy bridgehead was gradually eliminated. The Americans advanced along the WEST bank of the RHINE through KREFELD A10 and ORSOY A22. When the XANTEN area had been cleared by 2 Cdn Corps on 9 March, the enemy's last main centre of resistance had fallen. On 10 March, the Allied troops finally completed the mopping up in the bend SW of WESEL A24. At 1040 hours, an air observation post reported both WESEL bridges blown.

183. These two operations by the Cdn and Ninth US Armies had direct bearings on one another. The delay in mounting the American assault, due to the excessive flooding, caused First Cdn Army to bear the brunt longer than was intended; by so doing, they attracted to themselves several enemy formations from further SOUTH. On the other hand, the rapid success of the Ninth US Army attack in turn reduced the resistance in the NORTH, as the enemy found himself threatened with encirclement.

The operations achieved their object. 21 Army Group was now ranged along the WEST bank of the RHINE from DUSSELDORF to ARNHEM.

E. ENEMY DIVISIONS DESTROYED AND CASUALTIES INFLICTED

184. Although all the enemy divs engaged continued to exist in name at least, seven inf divs were virtually written off, while three para divs and 15 PG Div suffered very heavy casualties.

The Cdn Army took 22000 Prisoners of War with an estimated 22,000 killed and seriously wounded. The American Army took 29,000 Prisoners of War with another 16,000 estimated killed and long-term wounded.

Since 26 September, after the withdrawal from ARNHEM, the British and American Armies in 21 Army Group had taken 196,600 prisoners and destroyed 530 tanks and SP guns.

F. CASUALTIES SUSTAINED BY US

185. (a) Brit and Cdn casualties from 8 February to 10 March were killed 2532, wounded 11,104, missing 1464. Total 15,100.

Ninth US Army casualties from 23 February to 10 March were killed 1340, wounded 5839, missing 299. Total 7,478.

(b)

	Cumulative from D Day			
	Killed	Wounded	Missing	Total
Allied Contingents	1,232	4,154	423	5,809
British	26,040	85,073	14,941	126,054
Canadian	8,804	26,377	2,287	37,468
Total	36,076	115,604	17,651	169,331

SECTION 7 THE CROSSING OF THE RHINE AND THE ADVANCE TO THE BALTIC

A. THE GENERAL PLAN OF THE BATTLE

186. The intention of 21 Army Group was to establish a bridgehead over the RHINE, isolate the RUHR from the rest of GERMANY in conjunction with First US Army, and break into the NORTH German Plain.

The Army Group operation was given two code names:-

PLUNDER to denote the RHINE assault by the ground troops.
VARSITY to denote the airborne drop across the RHINE.

187. In general, the plans of Armies in PLUNDER were as follows:-

(a) Ninth US Army. Assault across the RHINE near RHEINBURG A 22. Protect the RIGHT flank of Second Brit Army and the bridging sites at WESEL A 24. Secure a bridgehead from the junction of the RUHR and RHINE rivers in A 21 - BOTTROP 42 - DORSTEN 44. Be prepared to advance to general line inclusive HAMM B 04 - inclusive MUNSTER A 97.

(b) Second Brit Army. Assault across the RHINE in the area of XANTEN A 14 and REES A 05. Establish a bridgehead from exclusive DORSTEN - all inclusive BORKEN A 36 - AALTEN A 27 - DOETINCHEM 07 - HOCH ELTEN feature E 96. Subsequently advance on a three corps front.

(c) First Cdn Army. Carry out feints along the RHINE on LEFT flank of Second Brit Army. Be prepared subsequently to advance into Eastern HOLLAND and protect LEFT flank of Second Brit Army.

(d) First Allied Airborne Army. Operation VARSITY was to be carried out by XVIII US Airborne Corps, of two divs. The intention was to seize the high ground and certain bridges about 5 miles NORTH of WESEL to speed up the capture of WESEL and assist the RHINE crossings.

D Day 24 March. A postponement of up to five days would be accepted if weather delayed the airborne operation.

188. The Air Plan covered long term interdiction to isolate the battle field and pre D Day bombing by heavies of jet airfields and enemy communications etc. On D Day the air forces were to provide escort and protection for the airborne operation and close support for the ground troops, with bombing of specific targets and neutralisation of troop movements.

B. THE FORCES EMPLOYED BY 21 ARMY GROUP AND THEIR ALLOCATION TO TASKS

NINTH US ARMY

189. (a) XVI US Corps (One armd and four inf divs)

To assault across the RHINE in vicinity of RHEINBURG, with RIGHT 79 US Inf Div and LEFT 30 US Inf Div. To secure the army bridgehead and prevent enemy ground action from interfering with use of WESEL bridge. To establish and maintain

.../contact with

contact with Second Brit Army on the LEFT.

The artillery support for the assault of XVI Corps was provided by 624 guns from 25 pr upwards.

H Hour 0200 hours D Day.

(b) XIII US Corps. (One armd and two inf divs).

To hold firm base on WEST bank of the RHINE from the bridgehead as far SOUTH as WORRINGEN F 37.

(c) XIX US Corps. (One armd and three inf divs).

To be prepared to pass through the RIGHT of Second Brit Army to secure the line HAMM - MUNSTER. To assume command of 17 US Airborne Div when released by Second Army.

SECOND BRIT ARMY

190. (a) 12 Corps. (One armd and three inf divs; one armd bde, one bde 79 Armd Div, one cdo bde).

(i) Capture river plain inclusive WESEL to inclusive HAFFEN A 14 as follows:-

RIGHT : 1 Cdo Bde cross RHINE NW of WESEL. To capture WESEL and bridges over R LIPPE and SEITEN Canal A 23.

LEFT : 15 Div cross RHINE on two bde front about XANTEN and establish bridgehead.

H Hour for Cdo Bde assault 2200 hours D - 1; for 15 Div assault 0200 hours D Day.

(ii) 52 Div to deny line of WEST bank of the RHINE to the enemy throughout the Corps front. Hold one inf bde group ready to cross river and operate under command 15 Div.

(iii) Extend bridgehead to line of R ISSEL.
15 Div to relieve 6 Brit Airborne Div in area HAMMINKELN A 24 and the bridges there over the R ISSEL.
53 Div and 7 Armd Div to build up across the RHINE.

(iv) 53 Div with under command 4 Armd Bde to cross the R ISSEL and capture BOCHOLT A 26.
7 Armd Div to cross R ISSEL once 53 Div was clear, and capture BORKEN. Thereafter be prepared to operate towards RHEDE A 26 and STADTLOHN 47.

(b) 30 Corps. (One armd div and four inf divs; one armd bde, and one bde 79 Armd Div).

(i) 51 Div to assault near REES A 05, capture REES and HALDERN A 15 and establish bridgehead.

H Hour 2100 hours D - 1.

(ii) 3 Brit Div to hold line of WEST bank of the RHINE along the Corps front. Later be prepared to operate under 8 Corps to develop Second Army bridgehead.

(iii) Develop bridgehead on a two div and later a three div front by a build up with 43 Div and 3 Cdn Div respectively. 3 Cdn Div to be prepared, under command 2 Cdn Corps, to capture EMMERICH at a later stage.

.../(iv)

(iv) Guards Armd Div to be prepared to pass through the bridgehead on the axis AALTEN - GROENLO 28 - HAAKSBERGEN 39, or on the axis BOCHOLT - VREDEN 38.

(c) XVIII US Airborne Corps (Two airborne divs).

(i) 6 Brit Airborne Div to clear and secure in general the NW portion of the DIERSFORDT Wood A 1746 and HAMMINKELN, and to seize the bridges over the R ISSEL EAST and NE of the village.

17 US Airborne Div to clear and secure, in general, the SE portion of the DIERSFORDT Wood and to seize the bridges over the R ISSEL about 2 miles NNE of WESEL.

Both Divs to start dropping at P hour, which was 1000 hours D Day.

(ii) The airborne divs were to establish contact with 12 Corps and 1 Cdo Bde, and 6 Brit Airborne Div was to be relieved by 15 Div. XVIII US Corps would then push on EAST, extending SOUTH of the R LIPPE, and assume command of 1 Cdo Bde. It also had a call on 6 Guards Armd Bde.

(iii) 17 US Airborne Div to pass to Ninth US Army when convenient.

(d) 2 Cdn Corps (One armd and two inf divs· one armd bde).

(i) To cross RHINE at REES, take 3 Cdn Div under command, and capture EMMERICH and the HOCH ELTEN feature.

(ii) To establish a bridgehead and bridge the RHINE at EMMERICH.

(iii) To revert to First Cdn Army when EMMERICH bridges were built.

(e) 8 Corps

This Corps held 11 Armd Div (Army reserve) and 6 Guards Armd Bde which was required for XVIII US Airborne Corps as early as possible. HQ 8 Corps was to relieve HQ XVIII US Airborne Corps (earmarked for a possible operation elsewhere) on D + 7, taking command of both airborne divs.

The Corps task would be to pass through the RIGHT of Second Army bridgehead, extend to the line DORSTEN to the NORTH, and be prepared to advance NE.

(f) In Second Army reserve were :-

11 Armd Div, administered by 8 Corps.
34 Armd Bde " " 12 Corps.

Army Troops - 115 Inf Bde; 33 Belgian Fus Bn; 2, 3, 4, 5 and 6 Dutch Indep Coys.

(g) RA

The artillery support for the assault by Second Army was provided by 1338 guns from 25 pr upwards.

(h) Engineers

The following engineers were employed in the army group operation:-

RE and Pioneers	37,000
US Engineers	22,000

NAVAL FORCES

191. Force 'U' of the Royal Navy consisting of 45 LCM(3) and 45 LCVP, supported Second Army's crossing. These craft were brought overland on transporters. Parties were provided for the erection of booms and nets on the RHINE, and for dealing with saboteurs, midget submarines, explosive motor boats etc.

.../On Ninth

On Ninth US Army's front, similar forces from the US Navy were provided.

FIRST CDN ARMY

192. (a) 2 Cdn Corps

(i) On passing from command Second Brit Army to be prepared to advance with:-

4 Cdn Armd Div on RUURLO A 18 and DELDON V 2907
2 Cdn Div on ZUTPHEN E 99
3 Cdn Div on DEVENTER Z 90
2 Cdn Armd Bde

and protect LEFT flank of Second Army.

(ii) If enemy should resist strongly at ARNHEM against 1 Cdn Corps, 2 Cdn Corps would attack across the R ISSEL against APELDOORN Z 70, probably with 1 Cdn Div.

(b) 1 Cdn Corps. (5 Cdn Armd Div, 1 Cdn Div and 49 Div)

(i) To assault from the NIJMEGEN bridgehead and capture ARNHEM.

(ii) To advance to the ZUIDER ZEE and cut German communications with Western HOLLAND.

C. ENEMY DIVISIONS STRENGTHS AND LAYOUT IN THE AREA

193. The enemy divs opposing 21 Army Group from EMMERICH down to the RUHR were:-

Four para divs, Three inf divs } in the line

One panzer div, One panzer grenadier div, One inf div } in immediate reserve

with another estimated 58,000 men from local depots and training units etc. Further SOUTH opposite Ninth US Army were four more inf divs. These forces nearly all came from First Para Army of Army Group 'H'. From EMMERICH WEST to the sea, Twenty-Fifth Army, consisting nominally of 30 and 88 Corps, was located.

On Ninth US Army's front it was estimated the enemy had about 220 guns, and that between WESEL and EMMERICH the crossings would be opposed by about 400. In addition, something like 1,500 HAA guns were known to be deployed in and around the RUHR.

194. On 21 Army Group front the RHINE was kept within its normal channel by a complicated system of dykes. If these were breached, a rise in the water table would result in widespread flooding of the low-lying areas on either side of the river. The normal width of 400 - 500 yards might increase to as much as 3 miles; on an average the velocity was about 3.5 knots.

195. There were no normal defence lines along the EAST bank of the RHINE similar to those found on the WEST bank, except at such places as WESEL, REES and EMMERICH, which had perimeter defences.

... /D. SUCCESS

D. SUCCESS ACHIEVED

THE RHINE CROSSING AND ESTABLISHMENT OF THE BRIDGEHEAD

196. The weather had generally favoured the pre-D Day air programme. In addition to the fighter effort, by D Day Bomber Command had flown 5243 sorties and dropped 24,983 tons while VIII and IX USAAFs flew 11,067 sorties and delivered 24,500 tons of bombs. This heavy programme culminated in an attack by 200 Lancasters on WESEL at 2230 hours just before 1 Cdo Bde attacked the town.

197. After an intense artillery preparation, the assault waves of four bns of 51 Div entered the river in their LVTs ("Buffaloes") at 2100 hours 23 March, and seven minutes later a report was received that the first wave was across. All crossings were successful; the enemy was thin on the ground in the area of the crossing sites and our counter-battery programme had effectively neutralised his artillery. During the night general progress was made and the outskirts of REES were reached.

At 2200 hours the Commandos started to cross (about 2 miles WEST of WESEL) and half an hour later were formed up outside WESEL waiting for the last bomb of the Lancasters to fall before attacking the town. By 0300 hours all units were in the town, Bde HQ being established in a cellar about 50 yards from the HQ of the WESEL garrison. This led to some fierce fighting in that area and to the death of the German Commander.

At 0200 hours the four leading bns of 15 Div were waterborne and in the face of light opposition successful crossings were made and initial objectives seized during the night. As enemy opposition developed it was strongest on the front of the LEFT Bde.

198. In Ninth US Army sector 30 US Div on the LEFT assaulted NORTH of OSSENBURG at 0200 hours, with three regts abreast. At 0300 hours, 79 US Div on the RIGHT crossed with two regts up. Resistance on the LEFT was strong, but bridging operations were soon under way.

199. At 0952 hours the first parachute serial arrived over the target and until 1304 hours the drop proceeded accurately. Over 1700 aircraft and 1300 gliders were employed, and some 14,000 troops were delivered. About 56 aircraft and under 4% of the gliders were destroyed.

Immediately following the glider landings a resupply mission of 540 tons was delivered in 240 aircraft which flew as low as 200 feet; 16 of these aircraft were lost. Over 90% of the supplies were recovered.

200. The airborne assault was successful. All objectives were taken by nightfall except that 513 Para Inf of 17 US Airborne Div had to deliver a night assault, which succeeded in capturing the high ground in the heavily wooded area NORTH of DIERSFORDT. Five bridges over the R ISSEL were seized intact, and HAMMINKELN was in the hands of 6 Brit Airborne Div.

The Airborne Corps took 3,500 prisoners during the day.

201. The ground troops continued to capture their objectives during the day, progress being quicker after the airborne drop. In the American sector DINSLAKEN A 33 was captured and in general the line of the road DINSLAKEN - WESEL was reached. Elements crossed the LIPPE - SEITEN Canal near LIPPENDORF A 2338. Class 40 bridges were open. WESEL was cleared by the Cdo Bde and junction made with 17 US Airborne Div. 15 Div captured HAFFEN and MEHR A 1248 and made contact with 6 Brit Airborne Div. One Class 9 bridge was working, in addition to numerous ferries.

.../On the LEFT

On the LEFT 51 Div made progress, but opposition at REES from Paratroops was very stubborn. The bridging and raft sites near REES were under heavy and accurate mortar and artillery fire.

202. The expansion of the bridgehead and the build-up proceeded well, though progress was slower in 30 Corps sector where REES held out until early on 26 March.

The US XVI Corps cleared the area EAST and SE of DINSLAKEN and by 28 March were in GLADBACK on the RIGHT, and in GAHLEN A 34 and DORSTEN A 44 on the LEFT. 17 US Airborne Div with 6 Guards Armd Bde and 1 Cdo Bde pushed on rapidly NORTH of the LIPPE river and on 28 March elements had captured HALTERN A 64.

12 Corps advanced NE and reached BORKEN A 36 and RHEDE A 26 with 7 Armd Div and 53 Div respectively on 28 March. 30 Corps were stubbornly resisted by German Paratroops but by 28 March they had secured the line HALDERN A 15 - ISSELBURG A 16 - ANHOLT. On the LEFT, where 2 Cdn Corps had taken command of the sector, EMMERICH had almost been cleared by 28 March.

THE ADVANCE TO THE ELBE

203. (a) While Ninth US Army continued to drive EAST along the autobahn towards HANOVER and the ELBE, Second Brit Army was directed to the ELBE between WITTENBERGE and HAMBURG.

(b) XVIII US Airborne Corps was directed on MUNSTER, with 6 Guards Armd Bde under command. When MUNSTER was secured, the Guards would revert to 8 Corps, and the Airborne Corps to Ninth US Army.

8 Corps, (11 Armd Div, 6 Brit Airborne Div and 1 Cdo Bde) was directed on OSNABRUCK, CELLE and UELZEN.

12 Corps (7 Armd Div, 4 Armd Bde and 15, 52 and 53 Divs) was directed on RHEINE, NIENBURG and LUNEBURG.

30 Corps (Guards Armd Div, 8 Armd Bde and 3, 43 and 51 Divs) was directed on ENSCHEDE, BREMEN and HAMBURG.

204. On 3 April, when they reverted to Twelfth US Army Group, elements of Ninth US Army had reached the R WESER SE of MINDEN, while other formations had begun to expand SOUTH beyond HAMM.

On Second Brit Army's front the break-out can be said to have started on 28 March, on the RIGHT of the sector where the bridgehead had developed more quickly. XVIII US Airborne Corps, 8 Corps and 12 Corps forged ahead rapidly, with armoured spearheads followed by inf who dealt with by-passed resistance and thickly wooded areas. The first organised resistance was met on the line of the DORTMUND - EMS Canal. 8 Corps obtained a bridgehead but 12 Corps found themselves up against students of various Officers' Cadet Schools who fought desperately around RHEINE and its airfields. Fighting went on from 31 March to 6 April.

XVIII US Airborne Corps had meanwhile ceased to be operational on 30 March, and 17 US Airborne Div and 6 Guards Armd Bde passed to command XIX US Corps (Ninth US Army).

Further to the LEFT, 30 Corps, who had broken out on 30 March, encountered stiff opposition from SS units and Para Regts who held them up at LINGEN until 6 April. 8 Corps were across the WESER on 7 April, and by 11 April were attacking CELLE on the R ALLER. It was cleared the following day and the advance continued to UELZEN where opposition again hardened and four days' fighting was necessary to reduce the place; tanks, inf, demolitions and booby traps were again the main source of trouble. LUNEBURG was cleared on 18 April, and by 24 April the Corps had cleared the WEST bank of the ELBE in its sector.

.../After

After clearing the RHEINE area, 12 Corps moved on to the WESER and made an opposed crossing in the HOYA area. Pushing on EAST, the Corps made for SOLTAU. At RETHEM, 53 Div had a fierce fight against SS troops supported by 88 mm guns on railway mountings, but they captured the place on 12 April, inflicting heavy losses on the enemy. SOLTAU was cleared on 24 April, and turning NORTH towards HAMBURG the Corps reached its sector of the ELBE on 26 April.

Continuing its advance from LINGEN, 30 Corps pushed on towards BREMEN not without encountering patches of desperate resistance from SS troops. On 18 April regrouping was effected for the assault on BREMEN. The town was attacked from the SOUTH by 3 Brit Div and from NORTH of the WESER by 43 and 52 Divs. Progress was considerably hampered by inundations and bad going, the port being finally captured on 28 April. 30 Corps operations then continued NORTH and NW to clear the peninsula to CUXHAVEN.

OPERATIONS OF FIRST CDN ARMY

205. After the capture of EMMERICH and the HOCH ELTEN feature, 2 Cdn Corps passed to command First Cdn Army. The Corps made a rapid advance NORTH through ALMELO and to the outskirts of DOESBURG and ZUTPHEN. On 2 April 1 Cdn Corps attacked from the NIJMEGEN bridgehead and by 5 April had cleared the area up to the NEDER RIJN. Meanwhile, 1 Brit Corps sector was taken over by HQ NETHERLANDS District under Army Group command.

2 Cdn Corps advanced towards OLDENBURG securing bridgeheads across the EMS; ZUTPHEN and DEVENTER were captured and 1 Cdn Div turned WEST on 11 April to assault across the R IJSSEL towards APELDOORN.

In conjunction with this attack, 49 Div (1 Cdn Corps) attacked and cleared ARNHEM on 15 April, and 5 Cdn Armd Div drove across the road APELDOORN - AMERSFOORT and reached the ZUIDER ZEE on 18 April.

2 Cdn Corps' advance continued on a wide front from OLDENBURG to GRONINGEN and LEEUWARDEN. Progress on the RIGHT was slowed down, but in the CENTRE the SOUTH bank of the EMS estuary opposite EMDEN was reached and by 26 April the whole of NE HOLLAND had been cleared except for a small strip of coast on the EMS estuary.

THE LAST STAGE

206. Second Army plan for the advance to the BALTIC was as follows:-

(a) 8 Corps — (11 Armd Div, 6 Guards Armd Bde, 1 Cdo Bde, 5 and 15 Inf Divs, and 6 Airborne Div earmarked for XVIII US Corps later). To establish bridgehead over R ELBE near LAUENBURG and advance NORTH to capture LUBECK and clear SCHLESWIG-HOLSTEIN.

(b) XVIII US Corps (From Twelfth US Army Group) — (7 US Armd Div, 8 US Inf Div 82 US Airborne Div and later 6 Brit Airborne Div). To cross the ELBE about 8 miles EAST of 8 Corps, advance NE and protect RIGHT flank of Second Army.

(c) 12 Corps — To cross ELBE in 8 Corps bridgehead, swing NW, protect LEFT flank of 8 Corps by masking HAMBURG and later to capture HAMBURG.

207. On Second Army front there were elements of about 15 German divs plus a miscellaneous collection of Units drawn from local depots and DENMARK.

The R ELBE was about 300 yards wide on an average.

.../208.

F. CASUALTIES SUSTAINED BY US FROM 23 MARCH TO 5 MAY

212.

	Killed	Wounded	Missing	Total
Allied Contingents	200	508	7	715
British	4339	13052	539	17930
Canadian	1503	4743	244	6490
Total	6042	18303	790	25135

SECTION 8. FINAL SUMMARY AND SOME POINTS OF INTEREST

A. STRENGTH OF THE FORCE ON 5 MAY 1945 (excluding US Forces)

213. (a) Formations

Armd Divs	7
Inf Divs	11
Airborne Divs	1
Independent Armd Bdes	9

(b) Personnel

Allied Contingents	1,803	Officers	32,715	Other ranks
Canadian	12,166	"	172,498	"
British	42,216	"	759,183	"
Total :	56,185	"	964,396	"

(c) Tanks 9248

Guns 6584

214. Second Tactical Air Force

Aircraft		
	Fighters and fighter bombers	1,044
	Medium bombers	216
	Recce aircraft etc	340
	Total :	1,600

Total sorties flown during the campaign 260,000.

B. ENEMY LOSSES

215. (a) Prisoners taken before capitulation 417,000
Capitulated troops 1,590,000

(b) A very rough estimate of enemy losses in guns is 15,000 - 16,000, but accurate figures of those captured and destroyed are not yet available.

Some 1,400 tanks and SP guns were destroyed.

(c) Total number of enemy divisions destroyed or written off was :-

Panzer	1
Para	3
Infantry	18
	22

In addition, about 32 divisions in all capitulated on 5 May 1945.

216. Total number of different enemy divisions engaged :-

Panzer and panzer type	13
Para	9
Infantry and infantry type	60
	82

.../C. TOTAL OF

C. TOTAL 21 ARMY GROUP CASUALTIES SINCE D DAY

217.

Nationality	Killed	Wounded	Missing	Total
Belgian	73	253	35	361
Czech	165	436	11	612
Dutch	31	133	1	165
Poles	1163	3840	371	5374
British	30379	98125	15480	143984
Canadian	10307	31120	2531	43958
TOTAL	42118	133907	18429	194454

D. ROYAL NAVY AND MERCHANT NAVY IN SUPPORT OF 21 ARMY GROUP OPERATIONS

218. Approximate total strength of RN personnel was - 125,000

Casualties sustained by RN - 7,564

219. Casualties to craft from D Day to D + 30

	Damaged	Total Loss	Total
Warships	84	26	110
Merchant vessels	52	24	76
Other craft	514	217	731
TOTAL	650	267	917

220. Enemy vessels destroyed -

Destroyers - 2

R Boats - 1

E Boats - 27

Midget submarines - 38

221. Sweeping operations -

Ports swept - 30 (including CHERBOURG, BORDEAUX, HAMBURG, ROTTERDAM and the whole length of the KIEL Canal).

Ships mined - 182

Minesweeper casualties - 16 sunk, 33 damaged.

222. Personnel, stores and equipment landed on the Continent (excluding US).

.../Personnel

Personnel - 1,715,967

Stores - 6,915,175 tons

Vehicles of all types - 338,282

E. THE MULBERRIES

223. These were designed to have an eventual capacity of 12,000 tons of stores and 2,500 vehicles per day.

The floating piers and pierheads were of concrete and steel, some 50,000 tons of steel being used in their construction. Concrete caissons, each some 200 ft long and varying in weight from 2,000 to 6,000 tons were sunk with a number of coasters to provide the deep water anchorages.

The equipment weighed over one and a half million tons and was towed across the Channel by 132 British and American tugs.

F. ANTWERP

224. Between 12 October 1944 and 30 March 1945, 5,960 V bombs fell in the ANTWERP area, killing 731 soldiers and 3,515 civilians.

A barrage of Heavy AA guns (192 US and 130 British) with 72 searchlights (British) was deployed for the defence of the port. The efficacy of these measures so increased that during the last seven days of the attacks, they were shooting down 97% of the bombs.

Meanwhile 25,000 tons of stores per day were being discharged at the port.

G. AMMUNITION

225. Total tons expended - 722,546.

Artillery ammunition expended -

25 pr - 13,082,005 rounds

Other ammunition up to 240 mm - 4,498,159 rounds

H. ENGINEER STATISTICS

226. (a) Over 1000 bridges were built of British "Bailey" equipment. Total length over 30 miles. The longest were three multi-span fixed bridges over the RHINE each some 1,8000yards in length and a floating "Bailey" over the MAAS of 1,440 yards.

(b) Stone quarried - 2,000,000 tons

Oil pipe line laid - 1,200 miles

(c) Airfields constructed or repaired - 125, representing an equivalent of 2,020 miles of roadway 20 feet wide.

FRANCE 1:250,000

CHERBOURG & CAEN

FOURTH EDITION "ARMY/AIR."

SHEET 3a & 8.

NOTES ON OPERATIONS

21 ARMY GROUP MAP No.1.

CONVERSION TABLE

Metres / Feet: 6,000 – 20,000 (scale)

ALTITUDE TINTS

METRES: 400 and above, 300, 200, 100, 50, 0

RELIABILITY DIAGRAM

Area revised from Survey photographs 8/42.

TO GIVE A GRID REFERENCE ON THIS SHEET

Pay no attention to the smaller coordinate figures at the corners and in margins.—They are for finding full coordinates–viz. 20

PAY ATTENTION TO LARGER MARGINAL FIGURES

POINT	MORTAIN		LETTERS T
East Take west edge of square in which point lies and read the figures printed opposite this line on north or south margin or on the line itself (on the face of the map.)	5	**North** Take south edge of square in which point lies and read the figures printed opposite this line on east or west margin or on the line itself (on the face of the map.)	1
Estimate tenths eastwards	9	Estimate tenths northwards	1
East	59	North	11
REFERENCE T 5911			

Unit .... metre
Square .... 1,000 metres
Reference to nearest .... 100 ..

Convergence is given for each corner of the Lambert Zone I grid on this sheet.

N.W.	N.E.	S.W.	S.E.
T.N. G.N. C-03°24′W.	T.N. G.N. C-01°51′W.	T.N. G.N. C-03°17′W.	T.N. G.N. C-01°39′W.

Mean convergence for the Nord de Guerre grid on this sheet is C-05°50′ W.

Magnetic North 10°08′ West of True North (June 1943), in the centre of the sheet. Annual change about 10 minutes easterly.

Geographical Section, General Staff, No. 2738.
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4th Edition 1943.
50,000/4/44 R.

HEIGHTS IN METRES

REFERENCE

- Railways (double) with station
- " (single) " "
- " narrow gauge or Tramway
- Roads over 8 metres
- " 6 to 8 "
- " 3 to 6 "
- Secondary roads — Other roads & tracks
- Rivers
- Canals navigable
- " irrigation
- Forts
- Woods, Orchards
- Brushwood
- Heights in metres — 319 Major, 182 Minor

Scale 1:250,000
or 1 Inch to 3·95 Miles.

Miles 10 9 8 7 6 5 4 3 2 1 0 5 10 15 20 25 30 Miles

Kilometres 10 9 8 7 6 5 4 3 2 1 0 5 10 15 20 25 30 35 40 45 50 Kilometres

1 Centimetre to 2·5 Kilometres.

Contour interval conforms to layers see tint box.
Certain main spot heights are indicated by a white tab to improve legibility.

GRID DATA

LAMBERT ZONE I "RED"

Projection	Lambert (Modified) Conical Orthomorphic
Spheroid	Clarke 1880
Origin	55 Grades N. Meridian Paris
False Co-ordinates of origin	600,000 metres E. 200,000 metres N.

GRID DATA

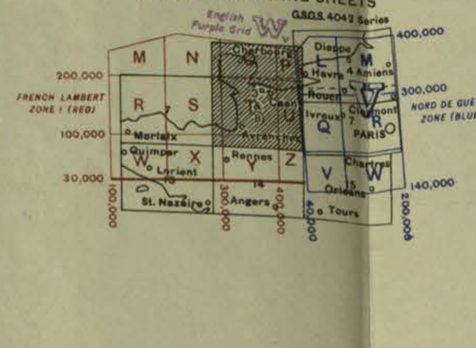
NORD DE GUERRE "BLUE"

Projection	Lambert (Modified) Conical Orthomorphic
Spheroid	Du Plessis (reconstituted)
Origin	55 Grades N. 6 Grades E. of Paris
False Co-ordinates of origin	600,000 metres E. 300,000 metres N.

HEIGHTS IN METRES

Compiled, drawn and Photolithographed at O.S. 1914.
Revised 1938. Partially revised 1942.
Revised from Survey Photographs and Photolithographed at O.S. 1943.

INCIDENCE OF GRID LETTERS AND INDEX TO ADJOINING SHEETS



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NOTES ON OPERATIONS
21 A.Gp. MAP NO. 4.

WALCHEREN AMSTERDAM — SHEET 2A & 3A
LILLE GHENT — SHEET 2
BRUSSELS LIEGE — SHEET 3

SCALE:- 1:250,000

1 Inch to 3·945 Miles,
or 1·014 Inches to 4 Miles.

1 Centimetre to 2·5 Kilometres.

05°23' June 1944

Magnetic Grid

Magnetic Variation at centre of sheet Annual Change 10' East

NORTH SEA

IJSSELMEER

AMSTERDAM
HAARLEM
HILVERSUM
UTRECHT
THE HAGUE
Scheveningen
ROTTERDAM
DORDRECHT
ARNHEM
NIJMEGEN
LEIDEN
Hook of Holland
Flushing
Middelburg
Roosendaal
Bergen op Zoom
LEUR
Breda
Tilburg
Turnhout
ANTWERP
Mechlin
Termonde
GHENT
BRUGES
Ostend
Blankenberghe
Knocke
Hulst
SCHELDE
WESTERSCHELDE
OOSTERSCHELDE
GRAND-SHOBRE
VOLKERAK
KREEKRAK
EAST SCHELDE
NORTH BEVELAND
WALCHEREN
SOUTH BEVELAND
TOLE
Zierikzee
Goes
Vlissingen
Terneuzen
Sluis
Ijmuiden
Zandvoort
Leiden
Gouda
Delft
Rijswijk
Vlaardingen
Maassluis
Schiedam
Gorinchem
Dordrecht
Rotterdam
Amersfoort
Baarn
Hilversum
Zeist
Soest
Apeldoorn
Arnhem
Nijmegen
Wageningen
Ede
Barneveld
Harderwijk
Elburg
Kampen
Zwolle
Deventer
Enschede
Hengelo
Almelo
Lingen
Meppel
Assen
Groningen
Leeuwarden
Sneek
Heerenveen
Emmen
Coevorden
Hoogeveen
Stadskanaal
Winschoten
Delfzijl
Dokkum
Harlingen
Terschelling
Vlieland
Texel
Den Helder
Alkmaar
Hoorn
Enkhuizen
Lelystad
Almere
Zaandam
Purmerend
Volendam
Edam
Monnickendam
Weesp
Naarden
Bussum
Huizen
Laren
Blaricum
Eemnes
Soesterberg
Zeist
Driebergen
Rijsenburg
Doorn
Amerongen
Wijk bij Duurstede
Culemborg
Vianen
Houten
Nieuwegein
Zevenaar
Doetinchem
Winterswijk
Oldenzaal
Rijssen
Hengelo
Borculo
Lochem
Zutphen
Deventer
Kampen
Zwartsluis
Steenwijk
Meppel
Beilen
Hoogeveen
Emmen
Coevorden
Stadskanaal
Winschoten
Delfzijl
Appingedam
Leer
Papenburg
Meppen
Lingen
Nordhorn
Bentheim
Rheine
Ibbenbüren
Osnabrück
Münster
Coesfeld
Borken
Bocholt
Wesel
Xanten
Kleve
Emmerich
Zevenaar
Arnhem
Oosterbeek
Renkum
Wageningen
Ede
Barneveld
Nijkerk
Putten
Harderwijk
Elburg
Kampen
Zwolle
Ommen
Hardenberg
Nordhorn
Bentheim
Rheine
Ibbenbüren
Osnabrück
Münster
Coesfeld
Borken
Bocholt
Wesel
Xanten
Kleve
Emmerich
Nijmegen
Groesbeek
Cleve
Goch
Kevelaer
Geldern
Venlo
Roermond
Sittard
Geleen
Heerlen
Kerkrade
Aachen
Eupen
Verviers
Spa
Malmedy
Stavelot
Liège
Huy
Waremme
Tongres
Hasselt
Genk
Maaseik
Maastricht
Visé
Herve
Dolhain
Limburg
Welkenraedt
Battice
Henri-Chapelle
Baelen
Membach
Eupen
Raeren
Aubel
Thimister
Clermont
Stoumont
Trois-Ponts
Vielsalm
Houffalize
Bastogne
Marche
Rochefort
Dinant
Philippeville
Couvin
Chimay
Beaumont
Binche
La Louvière
Soignies
Ath
Leuze
Tournai
Mons
Quiévrain
Valenciennes
Lille
Roubaix
Tourcoing
Armentières
Comines
Ypres
Poperinghe
Dixmude
Nieuport
Furnes
Dunkerque
Gravelines
Calais
Boulogne
Le Touquet
Etaples
Montreuil
Abbeville
Amiens
Albert
Bapaume
Arras
Douai
Cambrai
Peronne
Roye
Lassigny
Noyon
Compiègne
Senlis
Creil
Beauvais
Clermont
Montdidier
Roye
Albert
Doullens
Hesdin
Montreuil
Boulogne
Calais
Gravelines
Dunkerque
Furnes
Nieuport
Dixmude
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Rochefort
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Valenciennes
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Roubaix
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Armentières
Comines
Ypres
Poperinghe
Dixmude
Nieuport
Furnes
Dunkerque
Gravelines
Calais
Boulogne
Le Touquet
Etaples
Montreuil
Abbeville
Amiens
Albert
Bapaume
Arras
Douai
Cambrai
Peronne
Roye
Lassigny
Noyon
Compiègne
Senlis
Creil
Beauvais
Clermont
Montdidier
Roye
Albert
Doullens
Hesdin
Montreuil
Boulogne
Calais
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Dunkerque
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Stoumont
Clermont
Aubel
Thimister
Eupen
Raeren
Henri-Chapelle
Baelen
Membach
Welkenraedt
Battice
Herve
Dolhain
Limburg
Verviers
Spa
Malmedy
Stavelot
Liège
Huy
Waremme
Tongres
Hasselt
Genk
Maaseik
Maastricht
Visé
Sittard
Geleen
Heerlen
Kerkrade
Aachen

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NOTES ON OPERATIONS
21 A.Gp. MAP NO.5.
FRANKFURT - SHEET NE 50/6
LEIPZIG - SHEET NE 50/10
BREMEN - SHEET NE 52/6
BERLIN - SHEET NE 52/10
SCALE 1:500,000
1 Inch to 7·89 Miles
Miles
Kilometres
1 Centimetre to 5 Kilometres
East Frisian Islands
HELIGOLAND BIGHT
Heligoland
MECKLENBURG BAY
LÜBECK BAY
Hamburg
Bremen
Hannover
Münster
Osnabrück
Bielefeld
Kassel
Göttingen
Magdeburg
Halle
Erfurt
Weimar
Jena
Köln
Düsseldorf
Dortmund
Lübeck
Kiel
Schwerin
Braunschweig
Hildesheim
Groningen
Emden
Oldenburg
Wilhelmshaven
Cuxhaven
6°30' W.(1942)
6° W.(1942)
5°30' W.(1942)
4°30' W.(1942)
3/AUG45/15 M.R.S./1251/1695.

NOTES ON OPERATIONS 21 ARMY GROUP

MAP 6

GREAT BRITAIN & FRANCE-SHEET B1

CENTRAL EUROPE — SHEET B2

N O R T H

SCALE:-1:2000,000

S E A