FORTRESS EUROPE

HITLER'S ATLANTIC WALL

GEORGE FORTY
Fortress Europe
Hitler’s Atlantic Wall
George Forty
First published 2002

ISBN 0 7110 2769 2

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Published by Ian Allan Publishing

an imprint of
Ian Allan Publishing Ltd, Hershams, Surrey KT12 4RG.

Printed by Ian Allan Printing Ltd, Hershams, Surrey KT12 4RG.

Code: 0211/02

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Above: This coastal gun looks far too small for its massive camouflaged emplacement. Bundesarchiv

Below: Hitler’s Atlantic Wall: A typical scene of a small French seaside town prior to the Allied invasion. Note the beach obstacles extending into the sea, concrete anti-tank walls, barbed-wire entanglements, and so on. And of course there are plenty of well-camouflaged gun positions. Bundesarchiv

Inset: A 17mm OK L40 gun near Sangatte. Note the camouflage painting on the casemate. Bundesarchiv
Introduction & Acknowledgements

Throughout the history of warfare, either one side or the other has built defensive fortifications, varying from simple ramparts in the ground to massively complex earthworks such as Maiden Castle in Dorset, from ditches and mud walls, to complex stone structures like Hadrian’s Wall in northern England and the most amazing and enormous wall of all time — the Great Wall of China, together with a vast array of castles, watchtowers, and so on, to highly complex modern structures with mines, razor wire — even ground-installed atomic demolition munitions — in an attempt to defend themselves and their territories from the incursions of their enemies. One of these fortifications, built during World War 2, was given the title ‘The Atlantic Wall’ and it has been a source of abiding interest to many military historians ever since. It is to be the subject of this book.

When I began my research for the project I was immediately struck by the large number of books that had already been written about it — Mr Sven Wiger Olsen of Drammen, Norway, listed no fewer than 676 books and articles in the 2003 edition of his Atlantic Wall Bibliography. Granted most of them were in a mixture of European languages other than English, but that just goes to show how universal the interest still is in this remarkable piece of architecture. It is also true to say that the majority of these books and articles confine themselves to one particular location on the 5,000-plus kilometre length of the Atlantic Wall, or deal with just one aspect of it for example, how the fortifications were built or what weapons they contained. Obviously, if one is going to go into the ‘nitty-gritty’ of one of these aspects then this is sensible. However, in doing so one is liable to get immersed in facts and figures and perhaps lose sight of the human side of the equation. In this book I have followed the style of previous books in Ian Allan Publishing’s ‘At War’ series and tried to show the human side of the Atlantic Wall, starting with the builders, then the defenders and finally the attackers and destroyers (in battle) of parts of the Wall. To close the saga of the Wall, as I did in my similar recent volumes for Ian Allan Publishing, Channel Islands at War and Battle of Crete, I have given some information about the amazing structures which still remain to be visited, and also details of the large tourist industry which has grown up to cater for those who wish to visit such historical sites.

The Atlantic Wall failed to keep out the Allied invasion; perhaps it was never intended to do so, but rather to act as a tripwire so as to give warning, then to delay the invader and gain sufficient time to allow for counter-attack forces to be moved into position to deal with any threat. If this was the case — and it does seem to be a reasonable theory — then it failed for a variety of reasons, some of which had little to do with its construction and planning, but rather with the way it fitted into the overall German defence plans and, most especially, how it was adversely affected by the almost continual inter-service rivalry which plagued the German armed forces. All these points are examined in this study.

Acknowledgements

As this book is a ‘pictorial evocation’, that is to say full of photographs and personal stories, I have many people to thank for their generous assistance. First and foremost I must mention Herr Kurt Hansen of Wiesbaden, who has been a continual tower of strength with advice, translations and other assistance. I owe him my grateful thanks for his continued support over the past two years. Also Dr Jean-Pierre Bouchoux OBE, NSM, Conservateur du Musée de la Bataille de Normandie at Bayeux, whose help, advice and photographs have been invaluable; Luc Brecaut at Le Grand Blockhaus, St Nazaire; D. C. Davies at the Musée du Mur de L’Atlantique, Batterie Tody; Mr. Ivy Fowey Maj (Retd) & Mrs Tonie Hole; William Borchardt of the Panzer-Turner Research Group; Soren Bryskov of the Fisheries and Maritime Museum, Esbjerg, Denmark; Aleks Desorve of Dornem Raverside, West Flanders; Sven Wiger Olsen; Dr John Verbeeck of Den Haag; F. van Noort Collectiebeheer Fort a/d Hoek van Holland; Michael Ginnis MBE of CDS Jersey, who has once again given me his generous support as have all my other friends and contacts in the Channel Islands, Lt Col (Retd) Leif Ilsen; and Mrs Margaret Persent (editor of the Journal of the Fortress Study Group). My thanks also go to the Departments of Photographs at the Imperial War Museum, the National Archives of Canada and the Bundesarchiv, to the Department of Sound at the IWM, the MOD Whitchell Library, and PRO Kew. Also, I must thank those ex-soldiers and wartime workers who have allowed me to quote from their reminiscences, including: Tony Carter, Gilbert van Gricken, Jan Taute, Harry Herdender, Roland Fischer, Gerhard Koch and Hans Sippel. The staff of the US 1st Divisional Museum at Cantigny, Illinois, in particular Mr Andrew E. Woods, Research Assistant, have been most helpful both in supplying photographs and by allowing me to quote from Harley A. Reynolds’ riveting account of his D-Day landing on ‘Bloods Omaha’. Finally, I wish to thank my son Jonathan and my wife Anne, who have as always been of tremendous help and support, and suffered in silence during seemingly endless tours of ‘fascinating’ derelict bunkers.

George Forsyth
Brynaerpuddle, Dorset
August 2002
Chapter 1

The Reasons Why

Interestingly the initial OT workers were housed in a former British Army camp near Etaples, some 15km south-west of Boulogne, 'a corrugated iron barracks in which most of the workers who had been quickly assembled could be given shelter at once'.

In fact in Directive 16, Hitler gave his approval for this action when he said:

'If the largest possible number of extra-heavy guns will be brought into position as soon as possible in order to cover the crossing [to support 'Sealion'] and to shield the flanks against enemy action at sea. For this purpose railway guns will also be used (reinforced by all available captured weapons) and will be sited on railway turntables. Those batteries intended only to deal with targets on the English mainland (K5 and K12) will not be included. Apart from this the existing extra-heavy platform-gun batteries are to be enclosed in concrete opposite the Strait of Dover within the limits of their range. The technical work will be the responsibility of the Organisation Todt.'

Even when 'Sealion' was postponed indefinitely after the failure of the Luftwaffe in the Battle of Britain and Hitler's decision to invade Russia, no formal order was immediately given for the systematic building of defences anywhere along the coast, but rather major construction effort was given over to the building of submarine pens in places like Brest, Lorient and St Nazaire.

Blocking the Strait of Dover

As part of the 'Sealion' operation, both the Oberkommando der Wehrmacht (OKW) — German Armed Forces High Command - and Hitler fully appreciated the need to blockade the Strait of Dover and considered the task perfectly possible, because only 21 miles of sea separated the two coasts. In his book

Last Major Defensive Line

If one discusses the somewhat ethereal 'Iron Curtain' of the Cold War, although parts of it such as the Berlin Wall portion were solid enough, then the Atlantic Wall can be considered as being the last great defensive line to be built in Europe. However, unlike its predecessors, such as the Magnin and Siegfried Lines (the latter also known as the West Wall), its enormous length — over 5,000km (3,125 plus miles) stretching from Norway to the Spanish/French border — the vast range of different types of fortifications used; the massive work force employed; the incredible amount of concrete, steel and other materials used; and finally, the length of time it took to build (1940-45), all make it unique among European defensive lines.

The fact that much of it still remains is a testament to the work of its builders, despite the fact that a large number of those employed in the actual building work were from the occupied countries including both paid workmen and unfortunate slave labourers, all forced to work for the Nazis.

Although the intention may have been to create a continuous wall that would stand up to an enemy invasion anywhere along the northern coastline of Europe (and later, partly along the Mediterranean coastline as well), I doubt if even Adolf Hitler or his most optimistic Nazi planner ever imagined that this was entirely possible — or if they did so, then they must have been seriously deluded. However, all this work was done for a purpose, so it is relevant to look first at why it was built. What must also be kept in mind is that from time to time the demands of the other battle fronts, especially the insatiable Russian Front, required more and more of Germany's limited resources, so on numerous occasions, the requirements of the less critical western European area had to take a back seat. This was inevitable, because Germany did not possess unlimited resources even though the Nazis made use of foreign labour to a considerable degree and took over all the raw materials, weapons and other resources that were available in the countries it conquered.

Operation 'Sealion'

There was in truth no single underlying event that led to the initial building of major defences along the western European coast. However, a number of distinct phases can be seen within the period of their construction and these all had their own 'Reasons Why'. We should perhaps go back to the days of 1940 when Hitler's Third Reich was master of Europe — that is apart from one annoying small group of islands off the north-west coast of the continent. Despite the fact that the British Expeditionary Force (BEF) had been forced to make a disastrous withdrawal from France in May/June 1940, the stubborn soldiers showed no signs of surrendering as their major ally France had done, crumbling in a few short weeks under the shock of the German Blitzkrieg. However, steps were already in hand to deal with them — the planning for Operation 'Sealion' ('Sealion'), the amphibious assault on England (embodied in Hitler's Directive 16 — 'On preparations for a landing operation against England', issued on 16 July 1940) was well advanced and this included the installation of four heavy naval batteries in the Calais-Boulogne area.

The original purpose of these batteries was, therefore, not to defend the coast, but rather to back up the intended invasion. This is confirmed in a treatise on the Organisation Todt (OT), written postwar by Franz Xaver Dornsch, Deputy Chief of the OT (see Bibliography) in which he says:

'The first rather large, combined work of the OT after the construction of the West Wall was the installation of the heavy batteries at Cap Gris Nez. According to an official announcement of the Naval Warfare Command, this work was part of Operation 'Sealion'. It was supposed to have preceded the necessary fire support to the units that were committed for a landing operation on England. It should not go unmentioned at this point that Hitler declared, when inspecting the batteries on 23 December 1940, that he never gave a serious thought to Operation 'Sealion'. The value of the batteries, even without taking 'Sealion' into consideration, was no doubt afforded by the fact that a blocking of the Channel, up to a certain degree, for enemy ships was thereby given support.

'The naval commandant (Admiral Fischer) personally took it upon himself to designate the location of the batteries. The construction work itself was under the OT-Inspektion on the Channel coast in Audinghen, which I personally directed.'

Above: Map showing the locations of the original heavy coastal batteries.
The Channel Islands, especially Alderney, would have an important place in the eventual Atlantic Wall, so it is relevant to look briefly at this operation, which the Germans did not doubt would be the first step to the successful invasion of the United Kingdom. After some dithering and mind changing in Whitehall, it had been decided to leave the Channel Islands undefended. However, one told the Germans until after they had carried out an armed reconnaissance (on 28 June) during which they bombarded and machine-gunned St Peter Port in Guernsey and St Helier in Jersey, killing 44 civilians and wounding many more. Fortunately this was the only bloodshed during the invasion of the islands, by a small force from 216th Infantry Division, which was then occupying the Cherbourg peninsula area, together with Naval Assault Group Cherbourg (Kriegsmarine Artillerie Kommando) and some Luftwaffe light anti-aircraft guns. Commanded by Major Albrecht Lano, CO of 2nd Battalion, 369th Regiment (216th Infantry Division), who became the first island Commandant of Guernsey, the force landed peacefully by air at Guernsey airport on 30 June, then went on to visit and formally take over Jersey, Alderney and Sark together with the other tiny uninhabited islets of Herm, Brechou, Jethou and Lihou. So at least some of the German forces could legitimately say, in the words of their song, that they had been ‘fahr'n gegen England’ (‘marching against England’) successfully.

The Channel Islands became a special place as far as Hitler was concerned and, as we will see later, they rated them as important as to station the largest infantry division in the entire German Army there. The fortunate German would in fact have an almost bullet-proof occupation and become known as the ‘C -’ rather than the ‘coastal’ gunners. in this island, who were rightly convinced that they would all end up in POW camps there or in the UK. The Channel Islands would be the only part of the British Isles to be occupied by the Germans and the islanders would have to put up with five long years of occupation until they were liberated in May 1945. In this service the German and the islanders were equal in the eyes of history for the survival and the arrival of British troops. Some of the fortifications built on the islands were unique within the Atlantic Wall and will be covered in some detail later.

'Ve watch with attention the growth of the German heavy batteries along the Channel coast during August and September. By far the strongest concentration of this artillery was around Calais and Cape Griz Nez, with the apparent purpose of not only forbidding the Straits to our warships but also of shortening the shortest route across them.'

He then details the batteries as Scheidt does, then continues: 'Besides this no fewer than 35 heavy and medium batteries of the German Army, as well as seven batteries of captured guns, were sited along the French coast for defensive purposes by the end of August.'

Churchill goes on to write about the British defences, saying that he took a prorogation was in the whole of the business of the defence of Dover. On the other side of the Channel Adelphi, Hitler was also paying visits to the coastal areas. His personal train was attacked by the RAF near Boulogne on 23 December 1940 and had to be diverted in a convenient, safe railway tunnel close by, with flak guns protecting it at either end.

The Wehrmacht wanted a minimum of trouble during the initial period of adjustment. For this reason, although the German forces were deployed in Belgium and under occupation governments, numerous Dutch and Belgian officials continued to function in an administrative capacity. The Wehrmacht also treated France with deference, for the French, though beaten, still retained a considerable naval fleet as well as several unconquered colonies. And her civil servants, as in the Low Countries, could administer the country with only nominal German control, thus freeing the Wehrmacht to dispose of Britain.'

He goes on to explain how the Germans occupied only that part of metropolitan France which lay closest to England and the Atlantic coast, letting the Vichy government control the south-eastern part of France and even allowing it to retain an armed force of some 100,000 men so as to help with the maintenance of law and order. In 1940, therefore, the need for defences along the Atlantic coast was probably the last thing on the minds of the German planners.

Allied Strategy — A Second Front?

The most contentious issue between the USSR and the rest of the Allies was undoubtedly Joseph Stalin's continually repeated demands from 1941 onwards, that they should open a 'Second Front' in the West on the side of the USSR, in Europe, in order to divert pressure from his hard-pressed Red Army, which was then by far fighting the advancing German forces deep inside the USSR. Initially there was no reaction, however, as the assault which had begun on 22 June 1941 continued to succeed, and the German penetrations extended nearer and nearer to the borders of North Africa, it was growing pressure from the population of Britain, and then in the USA, to invade Europe.

Fortunately the Soviets were able to hold on to and withdraw deep and deeper into their vast country, whilst Churchill remained unwilling (and initially of course unable) to commit large-scale forces to a major assault, without first conducting considerable preparation and planning. Following on from visits by the Soviet Foreign Minister, Molotov, to London in early 1942, to press again for the opening of the Second Front, Churchill once more travelled to meet President Roosevelt in June 1942. Churchill reiterated the British view that a landing in Europe was impossible in 1942, but proposed in its stead a plan to invade North-West Africa (Operation 'Torch'). Initially the US Joint Chiefs of Staff opposed the proposal, but the obvious weakness of Britain and the Allied war machine (US industry was still getting into gear and the massive expansion of US armed forces had only just begun) forced them to reconsider and accept 'Torch' the following month.

The next major conference was held near Casablanca in January 1943, but here the absence of Stalin, who was too busy dealing with the defeat of Stalingrad to make the journey, the main topic discussed was the opening of the Second Front in 1944. When he announced that he would lead a large French Armée de Terre to aid in the Second Front in return for American recognition of Vichy France in June 1943. Once again the British considered this to be premature, especially as there was also much for the Allies to worry about in the Pacific war with the Japanese. As it turned out, it was eventually decided to opt for the invasion of Sicily (Operation 'Husky'), to be followed later by the invasion of Italy (Operations 'Baytown' and 'Avalanche'), whilst a cross-Channel invasion was once again put on hold, although it was agreed that a planning staff (COBIPE) would be established and that the build-up of US troops in UK would be accelerated.

It was not until the third Anglo-American conference, held in Washington in mid-May 1943, (code-named 'Triton'), that the target date for the cross-Channel invasion was finally agreed as 5 May 1944. This date was confirmed at the first Quebec conference (code-named Quadrant) held in August 1943, despite the fact that Churchill still favoured an offensive through the Balkans, rather than in North-West Europe. Stalin did not attend that conference either, but the Soviets still pressed just as hard for the Second Front. Operation 'Overlord' was the code-name given to the Allied invasion of occupied North-West Europe, whilst the assault phase, namely the landing by a 150,000 strong invasion force, was code
named ‘Neptune’. In February 1944, SHAEF (Supreme Headquarters Allied Expeditionary Force), the HQ of the Supreme Allied Commander, General Dwight D. Eisenhower, was activated and ‘Overlord’, the air, land and sea commander, produced the initial joint plan for ‘Neptune’. Changes, such as the expansion of the assault force from three divisions to eight (including three airborne) and the subsequent need for more landing craft that were by then in short supply, together with climatic and geographical considerations, led to the date for the invasion being narrowed down to the period 4–6 June 1944. D-Day was finally fixed for 5 June, but then had to be delayed for 24 hours due to bad weather.

Der Feind hört mit!

The Germans had a saying during the war, ‘Der Feind hört mit’ (‘The Enemy Listens’), their equivalent to Britain’s ‘Careless Talk Costs Lives’ campaign, so they were no strangers to the world of spies and spying. They had in the Abwehr a sophisticated military intelligence and counter-intelligence organisation which had been formed just after the Great War. Despite the fact that the Versailles Treaty had forbidden Germany from establishing an intelligence organisation, a counter-espionage group had been set up as early as 1920 within the Defence Ministry. It was known as Abwehr (Defence) and in 1933 its duties were expanded to include espionage.

It was later vastly increased in size and scope after the appointment of Admiral Canaris in 1935, so that by the beginning of World War 2, it was an extremely large and sophisticated intelligence network. Therefore it would be illogical to think that the Allied high level discussions, planning and preparations for the Second Front went unnoticed by the Germans or that there were relatively few German spies actually operating in Britain, and then only briefly until all were captured.

Undoubtedly, knowledge of what the Allies were planning as regards the launching of the Second Front had its effect upon the need to build new defences to protect North-West Europe. Thus it became rapidly clear to Hitler and the OKW that it would in future be necessary to defend the western coastline of Germany, so that they could continue to give the bulk of their attention to the campaign in the East. This led to the publication of an OKW directive on 14 December 1941, which detailed the building of the Neue Westwand, (New Westwall). It was issued with Hitler’s full approval, but signed by Field Marshal Keitel (Chief of Staff of OKW) and its opening paragraph set out the concept thus:

‘The coastal regions of the Arctic Ocean, North Sea and Atlantic Ocean which we control are ultimately to be built into a “New Westwall” in order that we can be sure of repelling any landing attempts, however strong, using the smallest possible number of permanently stationed troops.

The directive went on to explain that the aim was to construct a series of coastal batteries to ensure long-range coastal defence. In addition, it explained that it had been decided to build bunkers of the “vivarstfjeldmasse” (Vf) type, that is to say, reinforced field fortifications, that were different from the ordinary, usually temporary field fortifications (made of earth, wood and masonry). The Vf type would be built of masonry or reinforced concrete with ceilings and walls between 0.30m and 1.5m thick. In view of the fact that at that time there was little enemy air activity, open, circular gun emplacements were chosen. With the construction of the ‘New Westwall’, all the existing coastal artillery batteries were to be improved and extra protection from Stoßpunkt (‘strongpoints’) would be given to coastal areas considered to be under threat.

Priorities were given for the construction in certain specific areas. Norway was given top priority, firstly, because it was difficult to use mobile reserves there, then because of the terrain and weather, and finally, because there was an urgent need to increase the number of harbour defences available so as to protect coastal shipping. Belgium and France’s western coasts were then given second priority, with the open coasts of the Netherlands and Jutland third. Most of the construction of these coastal defences would be under Army control, but the Navy was made responsible for Norway and for all measures which involved sea warfare. Air defence was naturally put under the Luftwaffe, while the actual construction work in all areas was to be handled by the Organisation Todt.

Directive 40

As the war dragged on, the OKW was forced to send more and more reinforcements to other areas such as the Mediterranean and of course to the Eastern Front which continually demanded additional troops, so the defences in the West were inevitably weakened. This danger was appreciated by Hitler and the OKW and gave rise to them drawing up a plan for the defence of the
western coasts. The Küstenverteidigung (Coastal Defence) Directive 40 of 23 March 1942 endorsed this plan and as it is the main reason for the building of the Atlantic Wall, I have given it almost an entire chapter to itself which follows on next. However, before going into the detail of the main policy, it is worth while looking at another of the ‘Reasons Why’ the Wall was built.

**Pinpricks and Propaganda Coups**

On 2 July 1940, just two days after the Channel Islands had been occupied by German forces, Winston Churchill sent a note to Major-General Hastings Imray, who was then his personal chief of staff and a member of the Chiefs of Staff Committee, in which he commented on the way in which the Germans had carried out their operation and recommended that plans should be immediately formulated to land secretly by night on the islands to kill or capture some of the invaders. There should be, he said, a ready source of information about the islands available from ex-inhabitants who had been evacuated or who were currently serving with British forces.

A few days later his memo would be acted upon and resulted in the first operation to be undertaken by the newly formed unit — the Commandos. Sadly it was a complete disaster from start to finish; some of the launches which were to be used to ferry the commandos from the destroyers which took them to the Channel Islands were found to be unfit and had to be left behind, while others were damaged en route by the buffeting they received from the destroyers’ wakes; then the naval officers in charge of the remaining launches almost missed Guernsey completely due to problems with their navigational instruments; next the chosen enemy targets on Guernsey were found devoid of any enemy, and finally, after the raid had been aborted, due to tide problems, and the commandos had to swim out to the destroyer, it was discovered that three of their number could not swim, so had to be left behind to be captured by the Germans.

Fortunately this incident was followed by a completely successful raid on the Lofoten islands in northern Norway on 4 March 1941, during which factories producing glycerine were destroyed. More importantly, the current settings for an Enigma code machine were found aboard a German armed trawler. This was followed on 26 December 1941 by another raid on the Lofoten islands designed to divert German attention during a further commando raid — the bloody encounter at Vaagso on 27 December 1941. This small-scale operation against the German-occupied islands at the entrance to Nordfjord in central Norway, was designed to prevent German troops from being moved from Norway and sent to the Eastern Front. German military installations were wrecked and the supporting Royal Navy ships neutralised several of the nearby shore batteries.

Despite being only a ‘pinprick’ it was a great morale boost to the British public and was described in the British press as ‘The Perfect Raid’.

Other small-scale commando raids would follow, including a fair number on the Channel Islands and the French coast, with varying degrees of success. However, all these ambitious operations would be overshadowed by the attacks on St Nazaire on the night of 27–29 March 1942 and the even larger Dieppe raid on 19 August 1942. Clearly the raids prior to St Nazaire and Dieppe had their effect upon the German psyche — they enraged Hitler to such an extent that they caused him to issue the infamous order that all captured commandos should be executed. Therefore, they must have had their part to play in the formulation of Hitler’s subsequent Directive 40, The St Nazaire and Dieppe raids, however, took place after that directive had been written, so therefore can be fairly described as being the first two significant assaults upon the German Atlantic Wall, and as such deserve to be dealt with separately and in more detail than is possible in this opening chapter.

To summarise therefore, there were a number of ‘Reasons Why’ the Atlantic Wall was built, although the main one was obviously to protect Festung Europa from any major Allied invasion. The building took place over a long period, the main impetus being the all important Directive 40 which we will now examine in some detail.

Notes
1. ‘These were DeToGen for control radars designed to locate sea targets.
2. A Naval Assault Group is probably best described as being the Kriegsmarine equivalent of the Royal Marines.
3. See: After the Battle issue No 11: ‘German Spies in Britain’ for details.
The following Directive was issued by the Führer’s Headquarters on 23 March 1942, under the title: ‘Competition of Commanders in Coastal Areas’.

OKW/WESt/Operation No 001311

DIRECTIVE NÚMERO 40

I. General Considerations

1. In the coming months, the coastline of Europe will be vulnerable to the danger of an enemy landing in strength. The time and place of such landing operations may not be dictated by operational considerations only. For example, setbacks in other areas, obligations to Allies and political considerations, may persuade him to take action which might appear unlikely from a purely military point of view.

2. Even enemy landing operations which have limited objectives could have serious repercussions on our own plans if they result in the enemy gaining a foothold on the coast. Our coastal sea traffic could be interrupted and they may pin down significant numbers of our Army and Air Force in dealing with them, which may require them to be withdrawn from other important areas. Capturing one of our airfields or establishing a bridgehead would be particularly dangerous.

3. There are many important military and industrial locations all along the coastline or close by, some of which are equipped with especially valuable plant, which may tempt the enemy into making surprise local attacks.

4. Particular attention must be made to preparations in England for amphibious landings on open coastline, because they have at their disposal numerous armed landing craft, able to carry armoured fighting vehicles and heavy weapons. The possibility of parachute and airborne attacks on a large scale must also be considered.

II. General Operational Instructions for Coastal Defence

1. Coastal defence is a task for everyone and calls for especially close and complete co-operation between all units of the three services.

2. In addition to naval and air reconnaissance, the intelligence service must endeavour to obtain early information on the state of enemy readiness and their preparations for any amphibious landing operation. All suitable air and sea units will then concentrate on attacking enemy embarkation locations and their convoys, so as to defeat and destroy them as far from our coast as possible. However, it may be that by clever camouflage and/or by taking advantage of bad weather conditions, the enemy may achieve a surprise attack. All troops who may be exposed to such surprise attacks must be at a state of permanent readiness. One of the most important duties of commanding officers of such units must be to overcome a lack of vigilance among their troops which, as experience has shown, is bound to increase as time passes.

3. As recent battle experience has shown, the responsibility for planning and the implementation of all defensive

4. The distribution of forces and the building of defensive works must be carried out so that our strongest defence positions are located in those sectors most likely to be selected by the enemy for landings (fortified areas). Other coastal sectors that may be threatened by small-scale surprise attacks will be defended by a series of strongpoints, supported, where possible, by the coast batteries. Important military and industrial plant will be included within these strongpoints. The same principles will apply to offshore islands, whilst less-threatened areas will be kept under observation.

5. The coast will be divided into sectors as decided by the three services in mutual agreement, or should the situation demand it, by the responsible commander (see Para III-1 below) whose decision will be final.

6. The fortified areas and strongpoints must be able, by virtue of proper distribution of forces, completion of all-round defence and by their supply situation, to hold out for some time even against a superior enemy force. Fortified areas and strongpoints will be defended to the last man. They must never be forced to surrender from lack of ammunition, rations, or water.

7. The responsible commanders (see Para III-2 below) will issue orders by keeping the coast under constant observation and will ensure that reconnaissance reports from all three services are quickly evaluated, co-ordinated and sent to the headquarters and civilian authorities concerned. As soon as there is any evidence that an enemy operation is imminent, then the commander is authorised to issue the necessary instructions for co-ordinated and complementary reconnaissance on sea and land.

8. There can be no question of peacetime privileges for any
III. Competence of Commanders

1. The following are responsible for the preparation and execution of plans for coastal defence in the areas under German command:
   (a) In the eastern area of operations (excluding Finland): the army commanders appointed by the Army High Command.
   (b) In the coastal area of the High Command Lappland: C-in-C High Command, Lappland.
   (c) In Norway: Commander Armed Forces, Norway.
   (d) In Denmark: Commander of German troops in Denmark.
   (e) In the occupied western territories (including the Netherlands): C-in-C West. (For coastal defence the responsible commanders in (d) and (e) will be directly subordinate to the High Command of the Armed Forces.)
   (f) In the Balkans (including the occupied islands): Commander Armed Forces South-east.
   (g) In the Baltic Territories and the Ukraine: Commander Armed Forces Baltic Territories and Ukraine.

(f) The defensive preparedness, development and supply of facilities of installations, including isolated positions away from these installations. (This includes being equipped with all the necessary weapons needed for defence such as mines, hand grenades, flame-throwers, barbed-wire, etc.)

(g) The installation and communications network.

(h) Methods of ensuring that troops are always on the alert and that infantry and artillery training is being carried out in accordance with the special defence requirements.

4. Similar authority is conferred upon local commandants, up to sector commandants, so far as they are responsible for the defence of a part of the coast. The commandants designated in paragraph III-1 will in general, appoint commanders of army divisions employed in coastal defence as local commandants with full powers. In Crete, the Fortress Commandant Crete, will appoint them. As far as other duties allow, local commandants or Air Force/Navy commanders will be made responsible for the general defence of individual sectors or sub-sectors, especially air and naval strongpoints.

5. All naval and air units employed in strategic warfare are subordinate to the Navy or Air Force. In the event of enemy attacks on the coast they are required to comply with the orders of the commanders responsible for defence, in so far as tactical considerations permit. They must therefore, be included in the distribution of all the information they require for the duties, and close liaison will be maintained with their headquarters.

IV. Special Duties of the Branches of the Armed Forces in the Field of Coastal Defence

1. Navy
   (a) Organisation and protection of coastal traffic.
   (b) Training and employment of all coastal artillery against targets at sea.
   (c) Employment of naval forces.

2. Air Force
   (a) Air defence of coastal areas. The use against enemy landings of suitable and available anti-aircraft guns, under the orders of the commander responsible for local defence, will not be affected.
   (b) The completion of ground organisations and their protection against air attack and surprise attack by land; the latter in cases where airfields are not included in coastal defences and are therefore inaccessible.
   (c) Operational employment of aircraft. Attention to be paid to duplication of command implied by these special duties.

Orders and instructions which run contrary to this directive are hereby cancelled with effect from 1 April 1942. New operational orders which will be issued by commanders on the basis of my directive, are to be submitted to me through the OKW.

Signed: Adolph Hitler

Bones of Contention

In a dispatch, Dönitz ordered much of what had been said in Keitel’s earlier directive of the previous December. However, it clearly was the true starting point from which the Atlantic Wall proper was conceived. Reading it through one has to congratulate

in writers in the OKW staff for dotting all the ‘i’s and crossing all the ‘t’s in their desire to produce a set of rules that could not be misinterpreted. However, human nature and inter-service rivalry soon led to differences of opinion emerging, some of which were so fundamental as to almost invalidate the whole raison d’être of the Wall itself and to make the Allies’ task of breaking through it all the simpler. Whilst these differences are best commented upon at the end of this study when they have become more apparent, it is perhaps relevant here to at least say some of the main bones of contention such as:

- Who was really in command?
- Who controls what?
- Where is the main battle to be fought?
- Who controls the mobile reserves and where should they be located?

Who Was Really in Command?

Below Hitler and the OKW, instead of one Supreme Commander as was to be the case on the Allied side, the Oberbefehlshaber West (OBBW), Feldmarschall Gerd von Rundstedt, was purely a land commander, having no direct control over any sea or air forces, the senior admiral (Theodor Krancke who commanded Marinengruppe West) still received his orders direct from Oberkommandossmarine (OKM) — Navy High Command, while the senior Luftwaffe general (Feldmarschall Hugo Sperrle who commanded Luftflotte 3) received his orders direct from the Oberkommando der Luftwaffe (OKL). As Rommel’s chief of staff Hans Speidel wryly commented in his book We Defended Normandy:

"Operations at sea and in the air could thus be co-ordinated neither by the C-in-C in the West nor by the Army Group commanders. The military commanders were only partially informed of the intentions of the other two services and usually too late.

In any case von Rundstedt, who had gone into voluntary retirement at the end of 1941 after falling out with Hitler, only to be recalled in July 1942 to become C-in-C West, was really only in command ‘on paper’; every major decision was actually made by Hitler or ‘rubber-stamped’ on his behalf. It is said that von Rundstedt once caustically remarked that the only troop formation he was actually allowed to move was the guard at the gate of his own bunker quarters.

Who Controls What?

Just a few days after the issue of Directive 40 the Navy issued an order which contained the following words:

"Even if the fight for the coast extends to the coastal areas within the reach of the Army medium range artillery, control over the bombardment of targets at sea remains in the hands of naval shore commanders who have command over coastal artillery (including Army coastal artillery) in the sector for this purpose. The naval shore commanders are under the operational command of the respective Army divisional commanders only in the battle for the coast.

This muddled thinking produced a duality of command that might have worked all right in a straightforward situation such as the one that pertained on the Channel Islands, where there was a clear demarcation between sea and land targets, the
Navy being responsible for engaging the enemy whilst they were on the water, whilst the Army took over once they had landed. Anti-aircraft (AA) guns were obviously excluded and could engage enemy aircraft with impunity, thus the Navy C-in-C Channel Islands (SEEK-O-KI) exercised command over all Navy and Army coastal artillery, controlling their fire as and when necessary. However, this system of command for the defense of the Channel Islands against a determined enemy attack was never fully put to the test, although it does seem to have worked well enough within the tight limits of the small attacks on these tiny islands.

On the French coast, however, it was a different matter. Here the Army wished to group its coastal batteries inland around some 8km from the coast in order to reduce the risk from naval bombardment, whereas the naval commanders wanted their batteries to be situated as close to the coast as possible in order to be able to fire with line of sight directly upon assaulting enemy vessels. The resulting differences of opinion undoubtedly affected results. For example, if one looks in detail at the results achieved by the formidable coastal artillery battery at Longues-sur-Mer (4 x 152mm naval guns), when faced by the Allied armada on D-Day, we can see that it failed to sink or even to damage a single vessel of the enemy amphibious strike force.

Where Was the Main Battle to be Fought?

While Directive 40 clearly stated that all the defensive actions of the commander must be to defeat the enemy attack before it could reach the coast or, at the latest, on the coast itself, this undoubtedly went against the opinions of many of the advocates of mobile warfare. As we shall see, Feldmarschall Rommel, who would later play such a major part in improving the Wall's defences, was quite clear that the shoreline was the right place to defeat the enemy — witness his dictum ‘Die Hölle ist der Strand’. His main reason for coming to this conclusion was his personal experience in North Africa of having to move by day under constant enemy air superiority. The casualties both to men and materiel, especially during the Tunisian campaign, had left him with the firm conviction that reserve forces, in particular armour, had to be as far forward as possible, otherwise they would be decimated trying to get their panzers into battle. However, his ‘right them on the beaches’ policy was not shared by von Rundstedt and other senior officers, who favoured mobile defence.

Control of Mobile Reserves

This became one of the most contentious issues of the defence strategy. Panzer Group West, commanded by General der Panzertruppen Freiherr Geyr von Schweppenburg, who was completely opposed to Rommel's view that reserves had to be forward, brushed aside Rommel's criticisms of his centralised 'out of harm's way' policy by saying that even if Allied air power affected daylight movement, then the panzers would still be able to move quickly by night. Not only did he fundamentally disagree with Rommel but he also thoroughly disliked the Desert Fox's chief of staff, the brilliant General Hans Speidel, commenting on one occasion that Speidel had never commanded anything larger than an infantry company. In a postwar study he reiterated his criticism of Rommel and his theories on panzer movement thus:

“The following Rommel theories were fundamentally unjustified and have been proved to be false:
(a) ‘Panzer divisions cannot be moved when the enemy
has air supremacy,’ Under skilled leadership 12th SS Panzer Division and 2nd Panzer Division reached their operational area without serious losses. Panzer Lehr Division had its considerable losses only because of Rundstedt's express command to move forward by day, an order foreign to air and armoured warfare.
(b) ‘A main landing on the Channel Coast is still to be expected.’ This is a model example of clinging tenaciously to a preconceived opinion.
(c) ‘Without mobile panzer divisions, landings of fairly great local significance cannot be eliminated.’ Pure panzer divisions cannot fight with their mass and shock effect at all within range of great enemy battle fleets, least of all in flooded and mined terrain. Anyone who fought in Sicily and Salerno (invasion of Italy) will confirm that. Besides, for the sake of logic it must be stated that it is comparatively easier to bring up panzer divisions from a location far to the rear than to move locally mobile panzer reserves near the front. If the latter is possible, the first must be too.”

Such fundamental points of disagreement were bound to have an effect on the success or failure of the German defence plan, especially when the overall land commander, von Rundstedt, had no direct control over sea and air forces. Clearly the seeds of confusion were there from the outset.

Hitler's Table Talk

It is also interesting to note that only a few months after Directive 40 had been issued — on 13 May 1942 to be exact — Hitler was describing a recent inspection trip he had made to look at the defences in western France:

'I was accosted by one of the workmen', Hitler recalled, '“Mein Führer” he said, “I hope we’re never going away from here. After all this tremendous work, that would be a pity.” There is a wealth of wisdom in the man’s remark, for it shows that a man hates to abandon such safe positions as those on the Channel coast, captured during the campaign in France and consolidated by the Organisation Todt, and retire into the narrow confines of the North Sea.’

Further Directives and Orders from the Führer

Whilst Directive 40 was clearly the most important of Hitler's pronouncements as far as the Atlantic Wall was concerned, it was not the only one that affected the Wall. There are a number of others which were issued subsequently and which had a definite bearing on all or part of the Wall and so need to be looked at here:

• Fortification Order of 20 October 1941, which dealt specifically with the fortification of the Channel Islands.
• Directive 51 of 3 November 1943, which dealt with the situation that was emerging in the West that would lead to what Hitler described as being ‘War on two Fronts’.
• Führer Order No 11 of 8 March 1944, which laid down procedures for Commandants of Fortified Areas and Battle Commandants.
• Directive 62 of 29 August 1944, which dealt specifically with the completion of defences in the German Right.
Above: This massive 28cm Eisenbahngefechtz (railway gun), called 'New Brunswick', was located at Zeebrugge in Belgium in August 1942. The gun alone weighed 219 tons. Bundesarchiv

Above: Ammunition numbers of the 'New Brunswick' gun crew manhandle cartridges on a small railway truck. Bundesarchiv

Above: The vast turning dome of the Todt Battery's electric range-finder. Together with subsidiary fire-control posts it could cover an arc of 342°. Bundesarchiv

Above: Major Allouche Lanz, first commandant of the island of Guernsey, steps out of his commandeered car, whilst an island policeman holds open the door. RMM - NA2816
Fortification Order for the Channel Islands

The Directive issued by the Führer's office on 20 October 1941 read as follows:

1. Operations on a large scale against the territories we occupy in the West are, as before, unlikely. Under pressure of the situation in the East, however, or for reasons of politics or propaganda, small scale operations at any moment may be anticipated, particularly an attempt to regain possession of the Channel Islands, which are important to us for the protection of sea communications.

2. Countersores to the islands must ensure that any English attack fails before a landing is achieved, whether it is attempted by sea, air or both together. The possibility of advantage being taken of bad visibility to effect a surprise landing must be borne in mind. Emergency measures for strengthening the defences have already been ordered, and all branches of the forces stationed in the islands, except the Air Force, are placed under the orders of the Commandant of the islands.

3. With regard to the permanent fortification of the islands, to convert them into an impregnable fortress (which must be pressed forward with the utmost speed) I give the following orders:

   (a) The High Command of the Army is responsible for the fortifications as a whole and will, in the overall programme, incorporate construction for the Air Force and the Navy. The strength of the fortifications and the order in which they are erected will be based on the principles and the practical knowledge gained from building the Western Wall.

   (b) For the Army: it is important to provide a close network of emplacements, well concealed, and given flanking fields of fire. The emplacements must be sufficient for guns of a size capable of piercing armoured plate 100mm thick, to defend against tanks which may attempt to land. There must be ample accommodation for stores and ammunition, for mobile diversion parties and for armoured cars.

   (c) For the Navy: one heavy battery on the islands and two on the French coast to safeguard the sea approaches.

4. For the Air Force: strongpoints must be created with searchlights and sufficient space to accommodate such AA units as are needed to protect all important constructions.

   (d) Foreign labour, especially Russians and Spaniards but also Frenchmen, may be used for the building works.

5. Progress reports to be sent to me on the first day of each month, to the C-in-C of the Army and directed to the Supreme Command of the Armed Forces (OKW) — Staff of the Führer, Division L.

Signed: Adolf Hitler

Directive 51 [3 November 1943]

This Directive from the Führer really came about because of the war the war was going on the Eastern Front. Instead of a swift victory as they had achieved in North-West Europe, the German Blitzkrieg forces were now in the vast expanses of Russia, whilst in the Middle East events had also turned against the Germans and their inest Italian partners. Now there was also the inevitability of having to fight on yet another front as the Americans and British built up for the long awaited 'Second Front'. Directive 51 therefore opened with some sombre words:

"The hard and costly struggle against Bolshevism during the last two and a half years, which has involved the bulk of our military strength in the East, has demanded extreme exertions. The greater part of the danger and the general situation demanded it. But the situation has since changed. The Axis forces in the East remain, but a greater danger now appears in the West: an Anglo-Saxon landing! In the East, the vast extent of the territory makes it possible to land without a fatal blow being dealt to the nervous system of Germany.

"In very different ways should the enemy succeed in breaching our defences on a wide front here, the immediate consequences would be unpredictable. Everything indicates that the enemy will launch an offensive against the Western Front of Europe, at the latest in the spring, perhaps even earlier."

Hitler then went on to state that he could no longer take responsibility for weakening the Western defences in favour of the other theatres, and that therefore he had decided to reinforce them, in particular the areas from where the long-range bombardment of England will begin — in other words, the sector V-weapon sites — because he considered that it was there that the decisive battle against the enemy landing forces would be fought. Diversionary attacks were noted as being possible on other fronts and he cited Denmark as a possible location for a large-scale attack, despite the difficulties of launching such an undertaking, because if it was successful then the political and operational repercussions would be considerable.

Such an assault would initially require the whole of the enemy offensive strength being thrown against the German forces holding the coastline. Therefore:

"Only by intensive construction, which means training our available manpower and materials at home and in the occupied territories to the limit, can we strengthen our coastal defences in the short time which probably remains."

The directive then went on to delineate the ground weapons that would shortly be sent to Denmark and the other occupied areas in the West, such as heavy anti-tank guns, static armoured fighting vehicles, to be sunk into existing emplacements, coastal artillery, field artillery, mines and other supplies. They would be concentrated at strongpoints in the most threatened areas on the coast, which meant that everyone had to accept that the defences in less threatened areas would not be improved. If and when the enemy attacked, then immediate heavy coverings would be launched, so as to prevent them exploiting their landings and throw them back into the sea. Such emotive phrases as "high fighting quality", "attacking power" and "mobility" were used to describe these counter-attack forces, whilst "careful and detailed emergency plans" had to be drawn up. The Air Force and Navy must also play their part, "with all the forces at their disposal, regardless of losses."

The Directive then went into considerable detail as to what action the Führer expected from the armies, Navy, Air Force and SS to take, requiring them to submit their plans to him immediately for the follow-up action to be taken within the next three months. The Chief of the Army General Staff, the Inspector...
at 48 hours’ notice of being called up. All further personnel must immediately be ready to replace the heavy casualties that would be expected.

The Air Force

The offensive and defensive power of the formations stationed in the West and Denmark was to be increased. This would be done by backing for the landing units and AA units engaged in home defence, also from schools and training establishments, for employment in the West and Denmark. Ground establishments in southern Norway, Denmark, north-west Germany and the West were to be organised and supplied so that they were as decentralised as possible, to ensure that units were not exposed to enemy bombing at the start of major operations. This was especially important as far as fighter aircraft were concerned, which needed an increased number of emergency airfields. ‘Particular attention will be paid to good camouflage.’

The Navy

The Navy was to draw up plans to bring into action all naval forces that were capable of attacking the enemy landing fleet.

‘Coastal defences under construction will be completed with all possible speed and the establishment of additional coastal batteries and the laying of further obstacles on the flanks will be considered.’

As with the Air Force the employment of everyone from schools, training establishments and other land establishments on security duties was emphasised. Special attention was to be paid to defence against enemy landings in Norway or Denmark, in particular to plans for using large numbers of submarines in northern sea areas, even if this caused a temporary diminution of these forces in the Atlantic.

The SS

The Reichsführer-SS was to test the preparedness of units of the Waffen-SS and the police and make preparation to raise battle-trained formations from those on training, in reserve or recovering from the hard area.

Hitler closed Directive 51 with orders to the various senior officers he had named in the directive to report by 15 November, that is in just 12 days, on what steps they had taken and those they proposed to take. As we shall see, although much was accomplished in the next few months, fundamental misunderstanding existed between the three services and between various senior officers, would fortunately—from the Allies’ point of view—lead to final failure of these defence plans.

Führer Order 11

This was a general order issued for guidance to Commandants of Fortified Areas and Battle Commandants, for which there was now a need in various theatres of war, for example in Italy and on the Eastern Front, as well as at various places along the coastline of Western Europe. On 19 January 1944 he designated a number of coastal areas from the Netherlands as the Gironde estuary in south-west France as ‘fortresses’ and issued special instructions for their defence. Whilst the detail of the areas will be dealt with later, it is worth while naming them here:

The Netherlands

Den Helder, Ijmuiden, the Hook of Holland and Vlissingen (Flushing), located at the entrance to the River Scheldt.

France

Dunkirk (Dieppe/Calais), Calais, Boulogne, Le Havre, Cherbourg, and St Malo along the Channel coast; the harbours of Brest, Lorient, St Nazaire, La Rochelle (with U-boat pens at nearby La Pallice), and Royan at the mouth of the Gironde along the Atlantic coastline.

Then, on 3 March, the Channel Islands were also given fortress status.

The gist of Hitler's Order 11 was as follows:

1. A distinction was to be made between Festungsplätze (Fortified Areas or Fortresses) which would be under a Fortified Area Commandant and Ortsstülpspunkte (Local Staging Points) each commanded by a ‘Fortification Commandant’. The fortified areas were likened to castles of past eras, their aim being to ensure that the enemy did not occupy an area of vital operational importance. They would allow themselves to be surrounded and by doing so tie down the maximum possible number of enemy, who would thus be liable to successful counter-attacks. Local strongpoints on the other hand were within the battle area and would be defended tenaciously in the event of enemy penetration. They would act as a reserve of defence and should the enemy break through, as a cordon for the front, becoming places from which counter-attacks could be launched.

2. Each ‘Fortified Area Commandant’ was to be specially selected, a tough experienced soldier, preferably of the rank of general, and could not delegate his responsibilities. He would be appointed by, and personally responsible to, the Army Group C-in-C. They would ‘pledge their honour as soldiers to carry out their duties to the last’, The C-in-C Army Group was the only person permitted to relieve a Fortified Area Commandant of his duties or to order him to surrender; however, this could not be done without Hitler’s personal approval. Everyone within a Fortified Area would be under the orders of the Commandant, be they soldiers or civilians and irrespective of their rank. The Fortified Area Commandant held the military rights and disciplinary powers of a Commanding General, with both mobile courts martial and civilian courts to assist him. His staff would be the army commander of the local Army Group.

3. The C-in-C Army Group would be responsible for the top level of command of the Fortified Area Commandant in the Gironde estuary and in the Channel Islands as well as the fortresses.

4. Each ‘Fortified Commandant’ came under the orders of the local forces commandant and would be appointed by him and was to receive his operation orders from him. His rank would depend upon the importance of the position and the garrison strength. His duties called for: ‘especially energetic officers whose qualities have been proved in crisis’.

5. The strength of the garrisons of a ‘Local Strongpoint’ was to be fixed by the importance of the positions and the available troops. Orders were to be given from the HQ to which the Battle Commandant was subordinate.

Directive 62

This was the order for the strengthening of the German Bight defences and covered the following main points:

1. The area covered was to be the German coast from the Danish frontier to the Dutch frontier, as well as those North and East Frisian Islands which had not yet been fully fortified, whilst those that had been fortified were to be brought up to a full state of defence.

2. The planning and preparation of all necessary measures for the speedy construction of a second position, that would run from the Danish frontier at a depth of about 10km from the coast.

3. The person responsible for construction was named as Gauleiter Kaufmann of Hamburg. However, this was later changed to make the Gauleiters of Schleswig-Holstein, East Hannover and West-Prussia responsible for the defences which were located in their areas, whilst Kaufmann would supply them with what resources he had available and also act as their spokesman to X Corps.

4. C-in-C Naval Command North was to assume the direction of purely military tasks, with the Deputy General of X Army Corps responsible for carrying out the following tasks:

(a) Planning the defensive system and estimating the materials needed for the construction of permanent field fortifications; also for estimating the strength of the garrison needed for a full defence. (b) Setting the tactical siting of the defensive line in detail. (c) Establishing building priorities for the completion of the various sectors. (d) Deciding on the form which the construction would take in the light of past experience (technical and tactical) and what material was available. In addition, Deputy General X Corps was to form three more planning staffs composed of officers of all arms, plus Engineer staffs including the Naval Fortification Engineer Organisation stationed in the German Bight.

6. As far as priorities for construction were concerned the following had top priority:

(a) North and East Frisian Islands.
(b) The coastal sector opposite Sylt (Hindenburgdammen).
(c) The Eiderstedt peninsula.
(d) The river defence of the Elbe-Weser estuary.
(e) The coast from Brunsbüttel-Cuxhaven-Wesermünde-Wilhelmshaven inclusive.
(f) The Elms estuary with Delftij.

7. The remainder of the coastline had second priority.

8. The construction was to comprise a continuous anti-tank obstacle, with an articulated defensive system in depth, which was to be continuously strengthened.

9. The Gauleiter was responsible for procuring and employing civilian labour, accommodating and feeding them (including OT).

10. The OT was to be employed on the basis of direct agreement between the Gauleiter and the OT. Local OT Commanders were to report to the Gauleiter.

11. Gauleiter Kaufmann was to report to Hitler, via the Head of the Reich Chancery, as soon as possible on his plans for organising the work and raising the labour. Naval High Command North Sea was to report on the 1st and 15th of each month (via OKW) on the state and progress of the construction.

Notes


3. World War II German Military Studies, Volume 12.

4. As quoted in Grose-Roger Hitler’s Secret Conversations, 1941–1944.

5. The heavy battery on Guernsey was Batterie-Mira. The two on the mainland were to be on the Jersey peninsula and near Pumpell on the Brittany coast, but they were not installed. 20.3cm railway guns being put there instead — one in each location.

6. Sources: CROS Review 1979, published here by kind permission of CROS Memory.

7. The military arms and the largest of the major branches of the SS.
Building the Wall — The Germans

Division of Responsibilities

Although the Organisation Todt was responsible for much of the building work, it was actually only one of five elements concerned with the overall building programme. These were:

(a) Individual troops. Normal individual members of Army units, especially infantrymen, were responsible for constructing field fortifications such as weapon pits, foxholes and trenches.

(b) Divisional Field Engineers (Pioniere), the Army’s badged engineers, were responsible for a wide range of duties such as bridging, ferrying, demolitions, the construction of obstacles and, as far as their responsibilities within the building programme were concerned, all aspects of the distribution, recording and sowing of land mines, plus the location and use of flame-throwers.

(c) Army Construction Battalions (Baubataillone) were responsible for reinforced field-type constructions which were designed to withstand and give protection from bullets, shell-splinters and blast, but not prolonged bombardment. Where concrete was used, it did not exceed 1m in thickness.

(d) Fortress Engineers and Fortress Construction Battalions (Festungsbataillone) were responsible for supplying and mounting fortress weapons, conveying heavy loads, some tunnelling, compiling construction progress reports and maps, ordering and supervising tasks undertaken by the Organisation Todt (OT). In overall command of the Fortress Engineers was the Festungspionierkommandeur (Fortress Engineer Commander) General der Pionier der Festungen und der Eisenbahnpioniere Alfred Jacob, holder of the Knight’s Cross. Jacob held this post from 1 September 1939 for the entire war. His units contained experts in all branches of military engineering.

Below: The Reichsarbeitsdienst (RAD) got involved in building parts of the Atlantic Wall, such as on the Channel Islands. Here a column of RAD men marches at the slipway, marches along the South Esplanade, St Peter Port, Guernsey. This is a milestone on the construction programme on Guernsey and Jersey prior to the arrival of the OT and its foreign workers. OOS Jersey.
When Grubba reported back, he was sent to the Panzergrenadier depot at Spandau Barracks in Berlin, to begin his proper military service.

Horstmann, who commanded the 2nd Company of the 12th Tank Battalion, was also sent to Berlin, where he continued his training as an Artillery Officer. This was sometimes involved in fortification work. In speeches before he came to power, Hitler had promised that he would end unemployment (Arbeitslosigkeit), and did so simply by making labour on behalf of the state compulsory. A law was passed on 26 June 1935 which made it obligatory for all non-Jewish German men between the ages of 18 and 25 to work in the RAD/Männer for six months before their two years' military service (militärdienst) had been reintroduced on 21 May 1935). RAD/M was also contained some volunteers as well as the mass of conscripts; these volunteers stayed for at least a year. All were under the command of a cadre of Army officers and NCOs who had already completed their military service. The commander of the RAD from its inception until surrender was Konstantin Hierl, a man of considerable foresight as well as political and organisational skills. The first annual contingents numbered 200,000 men. There was also a RAD der weiblichen Jugend (RAD/wj) for young women.

After the war, he was sent to a training camp in the company of other RAD officers, where he would learn the skills necessary to be a good officer. He was then posted to the 1st Company of the 12th Tank Battalion, where he commanded his company for the next two years.

Another called up in 1940 was Rolf Münninger of Fellbach. He joined the 11th Company of the 12th Tank Battalion in Baden-Württemberg. He remembers that they had plenty of sport and training, but also plenty of work too! For example, they straightened and regulated the River Ill, dug a trench in which Siemens technicians were to lay a cable from Donausegenschiff to Freiburg, built a dam where there had been a bridge between Breitsbach and Colmar, and repaired bomb-damaged flats in villages in Alsace. At the end of his RAD service he was called up for the Army. Without doubt RAD service made the transition from civilian to service life much easier as the men became used to hard work, discipline and obeying orders.

In 1938, RAD/M was organised in Divisional Districts (Arbeitsgruppe) I-XXXII, each commanded by a brigadier, with a staff and an HQ garrison company and some eight battalions of 1,200-2,000 men, each under a lieutenant-colonel. The normal work unit was company-sized, containing some 200 men with an HQ and four platoons, each with three 17-man sections under a sergeant-major, although the ranks in the RAD were actually different from those of the Wehrmacht. The men all carried grenades and their transport was normally by bicycle. Pre-War World 2, the RAD supported the armed forces in the invasions of Austria, the Sudetenland and Czechoslovakia. From June 1938 to September 1939, 300 RAD companies also worked in conjunction with civilian contractors under the OT building the Siegfried Line (Weser) along the western border from Emsch münster (frontier with the Netherlands) to Lürrach (with Switzerland). About 100 companies assisted with similar work on the Ostwall fortifications on the Polish border.

In August 1939 the RAD was at its peak strength, with 360,000 men in 1,700 companies, when general mobilisation was declared. Almost straight away well over 60% (1,050 companies) were transferred to the Army to form Armoured training units. Following on from the end of the Polish campaign, Hitler ordered the RAD to be rebuilt, which meant that the RAD would once again be a part of the German armed forces. By 1940 there were 39 Arbeitsgruppe, Numbers XXXII-XXXIX being in Austria and Bohemia.

After the RAD service was over, some companies being sent to France to help build the Atlantic Wall and later on in the war they even manned anti-aircraft batteries, laid minefields and manned and defended fortifications, as well as building defensive earthworks along German borders from August to October 1944. This action caused the Allies to
construction, building materials and construction machinery industry, after years of very low output — one might even say after years of economic decline — to rise to exceptional achievements in a short time in connection with the construction of the national autobahn system, with the result that after 1936 about 1,000km of autobahn were completed every year. This achievement was primarily due to the fact that Todt, who himself was a man from private industry, opened the way to free enterprise from bureaucratic restrictions and encouraged it in every way. Furthermore, in spite of his individual treatment of autobahn engineering, for example with respect to adapting the construction to the landscape and other aesthetic considerations, he succeeded to a far-reaching degree by standardizing construction works and construction equipment depots, which, judging by conditions in Germany, certainly had to be regarded as a great step forward in the field of construction engineering. An additional important point was that since the national autobahn covered great distances and were frequently far from any residential areas of any size, it was necessary to quarter large numbers of workmen quickly and efficiently in these temporary camps. Under the direction of Dr Todt work was done in this field which was a model of its kind. Recognition of this work of Dr Todt’s was given expression in the so-called “Law Governing the Accommodating of Workmen in Construction Projects”. The general standards for the accommodation of autobahn workmen were thereby declared binding in connection with construction projects in general.

Dorsch goes on to describe Todt’s work in connection with the building of the Westwall, where construction works totalling around 8 million cubic metres of concrete and reinforced concrete had to be completed within a relatively short time, so, just as with constructing major highways, two of the main tasks were rapid labour procurement and workers’ accommodation. It would hardly have been possible to find a more suitable man than Todt to solve the economic problems concerned with the construction of the West Wall.

Fritz Todt

Fritz Todt was born on 4 September 1891, at Pforzheim, Baden, into an upper-class family. He served in the German Air Force during the Great War, was awarded the Iron Cross and was wounded while flying as an observer. Postwar, he joined the Munich firm of Sager & Wörner which specialised in building roads and tunnels, rising to become manager. Soon after Hitler came to power Todt was put in charge of the new state-owned Reichsautobahnen corporation and ordered to build a national highway system — laid out by the military and primarily for military use, but of course with enormous beneficial use for civilians. Todt helped to found the Nationalsozialistischer Bund Deutscher Technik and co-ordinated all the engineers and managers of the German construction industry into a single, enormous entity — Organisation Todt. The quiet withdrawn technocrat eventually held three posts: Minister of Armaments and Munitions; Head of the OT (in charge of highways, navigable waterways and power plants); and, from late 1941, he was also given responsibility for restoring the railways and road system in occupied Russia. In his capacity as head of OT he was, until his death in February 1942, in charge of the major construction works on the Atlantic Wall. However, he did not perform any military functions, as Dorsch emphasises in his treatment:
Speer, the Successor

Albert Speer was born in Mannheim on 19 March 1935, so he was some years younger than Todt. Son and grandson of successful architects, he was an instant hit with Hitler, who became a firm admirer of the 1,936bf4 architect and gave him such commissions as designing the Reichstag building and the Nuremberg stadium in which the most spectacular Nazi ceremonies were performed. In his memoirs he commented that if Hitler had had any friends he would certainly have been considered one of his closest. The shy, retiring Speer hated speeches and had no interest in fame. However, he did cover power and lost no time in taking over the reins when Todt was killed — and he had to move fast because power-hungry competitors like Göring were waiting in the wings to step in. Speer was responsible for continued miracles and lasted out the war.

Speer is considered by some to be the "good Nazi", especially as he "owned up" to his share of what the Nazis had done. However, this did not stop him being found guilty of war crimes and crimes against humanity because he had knowingly used slave labour. Waiving his right to appeal, he spent 20 years in prison and was released in 1966. He died in 1981.

The OT in Essence

From Dorsch's report one can summarise the expansion of the OT, thus its origins began in the autobahn-building organisation gathered together by Fritz Todt in 1933, which was honest, improved and expanded by Todt over the next five years, when, still without a name, it was sent to assist the Army Fortresses Engineers in constructing the Westwall along Germany's border with France. In June 1938 Todt began to recruit a raft of civil engineering firms into his organisation and organised them into brigades — known as Oberbauleitungen (Senior Construction Administrations). Then, on 18 July 1938, Hitler first called the body the Organisation Todt (OT). The men still did not wear uniforms. For a while the OT remained behind the Westwall repairing railways, roads and bridges, and gained the pride of its own armed forces. Then, as the German forces spread throughout Western Europe, the OT followed, its 200,000 men, still mainly German, performing all the previously mentioned tasks. However, as it grew even larger, the German element became the planners and overseers — now wearing khaki uniforms and special badges (see below), while the Ost-OT with the 200,000 was even larger. The Ost-OT were either foreign volunteers or forced labourers. This distinction was made more prominent when Hitler issued an order to say that in future the menial tasks — such as breaking up stones or carrying bags of cement — were no longer to be done by Germans.

By 1945, the OT was over a million strong and growing fast. The change from Todt to Speer made little difference to the smooth running of the OT, although Speer did put it on a more regular footing, so that it now had its own weapons (for self-protection, especially in areas where partisans were very active) and its own medical services. However, the grievous casualties suffered by the armed forces did cause a major change, in that more and more German members — officials and overseas — were called up for military service. Their places were taken by foreign volunteers and, in some cases, by ex-prisoners of war. The foreigners who joined often did so in order to escape being deported to Germany or (if Jewish) being sent to die in a concentration camp. This led to a wide range of different nations being represented in the OT, as well as ethnic Germans. These included Allied prisoners of war, people from the European countries nearest to Germany — such as the Netherlands, Denmark, Belgium and Norway; and those from further away such as from Albania, Russia and the Ukraine. The largest foreign group were ex-Soviet citizens. Thomas and Jourard's book Wembley-Auxiliary Forces lists the breakdown of the OT in November 1944, when it had reached its maximum as being:

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>44,000</td>
</tr>
<tr>
<td>Foreign</td>
<td>12,800</td>
</tr>
<tr>
<td>POW</td>
<td>165,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,309,500</td>
</tr>
</tbody>
</table>

As far as the Atlantic Wall was concerned, there were OT workers employed in all areas, including in sections of the Great Wall, in the Ukraine and in France. They included 12,000 German and 22,000 French workers, including 17,000 from the French North African colonies.

Odd Nansen was a Norwegian political prisoner, who spent most of the war in prison or concentration camps in various parts of Norway and Germany, such as Grieg, Vedal and Sachsenhassen. In his autobiography Fra Dag Til Dag (Day after Day) he writes about his first meeting with the OT thus:

"Besides the guards and us prisoners, the camp (No 1380) is teeming with queer creatures half-civilian half-military. They are OT-wokers. Most of them are apparently from Vienna, but there are also men from other countries, certainly a number of Czechs. We thought at first they were Russian prisoners of war, but they seemed to be detailed men on Arbeitsdienst (Labour Corps Service). So they are not ‘prisoners’ but ‘volunteers’. These men worked on all kinds of jobs inside and outside the camp, under the OT’s snuff-coloured ‘officials’ with the swastika hand round their arms. One of these is also in chief command of the work in the bade-woche. The detailed men have been up here since the early part of May. For three months then, in that time they have erected our huts and done a certain amount of work in the camp. It doesn’t leave one breathless with admiration."

Observers on the Channel Islands also had a low opinion of the OT men — not so much from their work ability, but rather from the way its leaders treated their workers. Here are the comments of two such observers, who made recordings for the Imperial War Museum’s Sound Archive. First, Mr R. W. Le Sueur (Tape No 103/3402, 1 a clerk who lived in Jersey who recalled:

"Now the people who were in charge of the work were not the military. The organisation responsible for all this work was called the Organisation Todt. There was a Doctor Todt who was responsible for it. I think he went down as a war criminal in the end. And those who were members of the OT were, they really were a kind of sub-species from what one could make out. They were people who had been crafty enough not to get involved in the armed services. They were people running rackets; they were people who were, in many cases, the foremen, and had just come out of prison and for whom society had — the sick society of Nazi Germany that is — had suddenly found a place. And they were a pretty revolting bunch of people. And they treated those under their care, those under their charge, in a terrible way."

Mr E. J. de Se Croix (Tape No 101/3402/2002, who had worked on the docks in Jersey, said when asked what OT meant:

"This was the German construction organisation. They were beasts, there was no two ways about that. . . . their manner generally, particularly to the men under their control, could only be described as bestial . . . it was frequently seen that the men had been beaten for the slightest thing."

OT Uniform

OT personnel were ex-Czech Army uniform. Odd Nansen described it as being ‘snuff-coloured’, others called it colour olive-green, khaki or even brown. However, it was very like other German military uniforms being sufficiently similar to normal Army seyle to be misidentified, and thus its wearers mistaken as combatants — especially by anyone who had not the fairest idea what the inscription ‘Organisation Todt’ meant. This worked very much to the disadvantage of a number of OT men who were employed in the Dieppe area during the time of the Canadian and British raid in August 1942. They were occupying a large hotel in Pourville, where they had started building weapon pits and pillboxes. Their senior staff was Hotel de la Terrasse. During the raid some of these bunkers were encompassed by the fighting and, consequently, the OT workers were mistaken for German soldiers and killed. Fortunately
were no reprisals, as the information that the OT wore military-style uniforms had never been officially passed on to the British via the Red Cross. Later of course they became a fully-uniformed paramilitary force, with a range of weapons for self-defense, so they were 'fair game' on the battlefield from then on.

Up to the period just before the start of World War 2, the majority of OT personnel wore civilian clothes. The exceptions were the 'top brass' who would have been uniformed members of the three armed services, RAD or one of the other Nazi organisations, including Specialists (Sonderführer) who were interpreters, radio specialists, cameramen, laboratory technicians and such like, with nominal ranks up to that of battalion commander, but with no actual military rank. Once war started, these men had to be uniformed as has already been explained.

The first type of rank insignia was introduced in 1940 and this was a series of armbands (see examples below). Then in 1942, arm chevrons and shoulder straps (in pairs) were introduced, with coloured piping on the shoulder straps to identify the branch of the service. OT stars (pips) were used on the shoulder straps to denote the senior members such as the commanders of construction units, medical services, communications units, equipment providers and so on. The colours of the piping were black for construction and accommodation control, dark blue for medical, white for equipment, provisions and messing, brown for propaganda, yellow for signals, green for administration, and carmine for musicians.

In 1943 yet another series of rank insignia was introduced, which replaced shoulder straps with arm chevrons, collar patches and armbands. Under the new system OT workers, OT leaders, OT leaders, OT staff leaders and OT higher leaders all wore appropriate rank insignia. There is not space to show all these, so just a selection is illustrated below. For full details see Brian L. Davis's most comprehensive book which is listed in the Bibliography.

OT Work in North-West Europe

Dorsch lives the work done by the OT from after the French Armistice onwards as being:

- General repairs to the network of canals, particularly in the region of northern France and Belgium. Within the scope of this work the OT also undertook the clearing and repair of various seaports, such as Boulogne, Calais and Dunkirk.
- Tackled in parallel was the construction of sheltering metal oil reservoirs in the various ports in the Bay of Biscay, and construction of bombproof shelters for the more important harbours and oil installations for the troops. The OT also took over the construction of airfields in the zone of Regional Air Command for Brussels.
- Implanted all new batteries on Cap Gris-Nez (to support Operation 'Sealion').
- Constructing U-boat shelters.
- Construction of the Atlantic Wall.

Cap Gris-Nez Heavy Batteries

We have already covered those 'Sealion' guns in an earlier chapter. However, from an OT point of view it began with the emplacement of some 20 heavy calibre guns and the construction of subsidiary installations (quarters for personnel, medical facilities, ammunition bunkers and so on) in a semi-permanent manner (20m ferro-concrete works). All this work had to be completed in eight weeks, the guns remaining without cover. The next demand was that, without interfering with their readiness for action, the guns were to be provided with a 3.5m thick ferro-concrete roof and additional subsidiary installations. The first phase had required the handling of some 30,000 cubic metres of ferro-concrete, but the second phase was much longer, dragged on until the spring of 1941 and involved some 130,000 cubic metres of ferro-concrete, so a total of 160,000 cubic metres was used at Cap Gris-Nez alone.

The U-boat Berths

In the autumn of 1940 OT received orders from Hitler to build bombproof U-boat shelters on the Atlantic coast, beginning at the ports of Brest, Lorient and St Nazaire. In 1943 these were extended to include shelters at Marseilles and Toulon in the Mediterranean. In the main the Engineer and Fortification General drew up the patterns for the types of shelters, then these were forwarded to the OT for it to draft and work out the construction plans in detail. Some 96 bombproof berths were built, including requisite workshops, covered locks and other subsidiary installations. Work on a further 33 was under construction when the invasion began.

Work on the Atlantic Wall

In the autumn of 1943 the OT received orders to start construction work on the Channel Islands, as Hitler feared the enemy might regain possession of the islands which would then be a constant threat to the trade of France and be able to provide an excellent 'jumping off place' for the enemy once the invasion began. Then in 1942, came the full directive (Order 40), which was as Hitler put it: 'the clear-cut conception of the Atlantic Wall defense system'. He went on to explain that the development of the Wall was based upon the following basic principles.

1. Under all circumstances inapplicability of traffic in the U-boat bases was essential, even if an invasion should initially be successful. Work on unfinished bases must continue and the bases equipped for all round defence.

2. Every port that could serve for large-scale landings must be rendered inaccessible to the enemy, so as to compel him to carry out all landing operations on the beach under protected coast and hence under less favorable conditions than within a harbour. Therefore the all-round defense of all ports within the framework of the Wall is essential.

3. Defensive power must be concentrated as far forward as possible, that is close to the coastline, so as to tackle the enemy at his weakest moment, namely while landing. It also meant being able to reach as far as possible seawards with artillery.

4. Wherever possible guns were to be provided with ferro-concrete roofs as protection against air attacks. The objects to this was to provide the soldiers in the fields of fire and make all round fire impossible, but Hitler discounted this with the remark that in the event of an air attack meeting with only limited success, the guns could be put out of action by just a few large fragments. (As we shall see later, this proved to be incorrect.)

5. The basic principle underlying the technical equipment, the choice of location and the type of installations was the same as in the case of the Westwall, namely that: 'The final struggle for a position is fought by the infantry', and therefore provision had to be made for adequate and secure shelter space for them, where they could weather out the shelling and blowing preceding any enemy close combat attacks, without their combat efficiency being reduced.

Prior to Minister Speer talking with Hitler, Dorsch had given him an estimate of 450,000 cubic metres of ferro-concrete per month as being the highest figure the OT could handle — after a few months getting things under way. Later, Speer, as the Chief
of OT, and in order to be on the safe side, reduced this figure to 300,000 cubic metres per month on all projects including the U-boat pens. In fact, the amount of ferro-concrete work done by the OT between July 1940 and July 1944, was a staggering 17,600,000 cubic metres, plus 25 million cubic metres of ground work handled amongst the OT’s other duties. However, he is careful to stress that the OT did not carry out the work itself, but rather had all the work entrusted to it carried out by firms of building contractors. Even the manpower employed by the ‘Mobile OT’ was supplied by firms. The OT was not directly under the command of the Wehrmacht, but was treated as a subsidiary organisation (Wehrmachtsdienst), because, lacking the facilities granted in the war zone and the occupied territories, it would have encountered extreme difficulties. In a subsidiary organisation to the Wehrmacht, OT personnel could travel on Wehrmacht tickets and it could have its supplies shipped on Wehrmacht consignment notes. It also had the right to demand Wehrmacht billeting facilities, to use Wehrmacht telephone and cable lines and all other installations of the Wehrmacht. Naturally it was subject to the directives issued by the Wehrmacht command agencies in respect of its actions in the war zone and so forth. Direct subordination of the OT to any one of the branches of the Wehrmacht was not possible because the organisation had to work not only for all three branches of the Wehrmacht but also, for example, on a comparatively large scale for the Ministry of Armaments, a further reason why it needed its own facilities for its connections with the building industry and for procurement of supplies and so on. Hence the OT accepted definite contracts from the Armed Forces and then had to fulfill them on its own responsibility.

As far as the Atlantic Wall was concerned an agreement was reached at the end of 1942 concerning the construction work, between the General of Engineers and Fortifications in OKH, Alfred Jacob, and HQ OT. According to this the sites were to be chosen solely by Fortress Engineer staff, whilst the building contractors then to do the work were chosen by the OT Construction Group Chief.

'A decisive factor’ to quote from Dorsch’s account:

‘in the Atlantic Wall construction was the approval given on 22 August 1942, by the Chief of Staff of the West General Kurt Zeitzel, to construction work being continued until 1 May 1943 in such a manner as though no landing by the enemy were expected by that date. This approval made the serial mass production of the construction parts possible on a purely building economical basis, without regard to the combat efficiency of the installations at any given moment, whereby an increased capacity was brought about. Thus, in April 1943, the record was reached - 870,000 cubic metres of ferro-concrete work being completed in that month.’

He goes on to explain that the reason for the decrease in output after that date was due to the necessity, starting in May 1943, to repair the Mühlen and Eder Valley dams which had been destroyed by the RAF, a considerable part of the construction capacity being transferred from the Wall to Construction Group ‘Ruhr’ (it took OT four and a half months to repair the dams). Dorsch also says that, in all, some 10,400,000 cubic metres of ferro-concrete work were built into the Atlantic Wall. In reply to criticisms that the Atlantic Wall was too thin or not deeply enoughorganised, Dorsch points out that from the constructional point of view it would hardly have been possible under the circumstances prevailing after 1942 to achieve any better capacities for ferro-concrete work except at the expense of other military or war industry structures. Had work begun immediately after the French armistice, then the picture would have been entirely different. Dorsch says that, towards the end of 1943, he had drawn Hitler’s attention to the fact that it would be necessary to slow down work on the Wall, because in the case of an emergency it would be impossible to man it. Hitler asked him how many bankers would be available in the completed Wall and how many men they could accommodate on the average. He had replied that at best there would be 15,000 bankers with a capacity of six men in each, to which Hitler replied (to Keitel) that this figure would not even suffice to hold the staff. Actually the OT had handled over 9,671 ‘ready to occupy’ bankers (minimum 2m ferro-concrete), and 3,976 field-type bunkers, so the total was 15,647. In addition, the concrete work had been done on a further 1,236 permanent and 265 field bunkers before the invasion began.

Of course the OT was not left alone at any time to concentrate on the Wall. Dorsch mentions the building of U-boat bases, E-boat bases, various structures for the Air Force, plus such work as the Bauxite mines in Brüggen, near Marseilles and tungsten mining at Fosseiguier. He also mentions the launching sites and servicing installations for V-1 and V-2 missiles including dummy sites, construction of the so-called Millipede (Tausendfüßer) — a long-range gun with 12 x 160mm barrels. In addition to ‘other work’ the OT also had to put up with enemy interference, the V-weapon sites at St. Omer, for example, being repeatedly attacked with heavy bombs and totally destroyed.

Wages

The German and foreign labourers employed building the Wall were, according to Dorsch, ‘paid at the current wage rate’. He goes on to say that, ‘It is worthy of mention, for instance that the Dutch OT specialist worker received a higher wage than a corresponding German OT specialist worker employed alongside of him.’ Payment for materials used also took place, on the basis of properly regulated contracts and proper lawful purchase’. Despite Dorsch’s statements, the reality was somewhat different — as can be seen by the comments of a French OT volunteer in the next chapter.

Notes

1. In fact, after the outbreak of war, volumes for the Wehrmacht were called up immediately and did not do any RAG service.
2. See Thomas and Jeroen Wehrmacht Auxiliary Forces.
3. Inside the Third Reich by Albert Speer.
4. Clearly the Germans had no idea whatsoever about the construction of the prefabricated Mulberry Harbours, which the Allies would use on the Normandy coast.
5. It is not clear whether this was the same as the ‘Site V-7’ which can still be seen at Minsteroyeaux, just north of Calais, where thousands of deported workers and German political prisoners dug tunnels to house the ‘London Canals’ — five tunnels, delivering 1300 long-cannons, which were supposed to fire once every six seconds. Used at Albert (northern) this device, which was supposed to shell London from the French coast, was never used, but the site is now visible (see chapter 12).
Building the Wall — The Workers

Types of Worker

Whilst German fortress engineers, both military and civilian, German industry and of course the OT, provided the expertise for building the Wall, the men who toiled and died had little or no training in construction. Some were on the Channel Islands, stayed for about a year, but were then returned to the mainland. They said that they had been employed by the Dutch firm of Bosland & De Wolf. Neither of these firms comes to mind. All the Dutch firms were sub-contractors for the German firm of Wolff & Goebel. With Aldersley the men were stationed in Norderney Camp, which housed workers of all nationalities. By January 1943 there were some 900 men in this camp, including just over 150 Germans, a few Frenchmen, the rest Russians, then in September 1943 300 French Jews arrived. 

Voluntary workers were a daily occurrence at the Norderney Camp and in other camps on Aldersley.

Major Bunny Panchett quotes from two victims who survived in his book Aldersley, Fortress Island.

"The dead were carried out with flag, foot, stick, piece of hessian or any other weapon. The reasons given were for trivial breaches of the harsh regulations and often there was no palpable reason at all."

Until 1942 no one was actually forced to relocate to Germany. Prices and wages were at first frozen, later moderate increases granted ... Another new institution was a German type of labor service originally introduced to act as a sort of manpower pool (or demobilized Army personnel), with the task of repairing war damage ... Lax, compulsory labor service for all Dutch boys at the age of 18 was decreed ... It was last piece of German legislation that affected the greatest number of people. At first, all unemployed persons under the age of 40 were compelled to register. Then German task forces started combing Dutch factories for men who would be useful in armament plants in the Reich. Workers who refused to relocate were placed in labor camps or simply transported to Germany. The labor draft became more and more an outright deportation, and the railroad stations were often filled with weeping women and children who saw their husbands, fathers and brothers depart for a very uncertain future ... On May 15,1942 a new regulation ordered all men between 18 and 35 to register for work in Germany. Three age groups were promptly called up and transported to Germany."

The treatment of the slave labour by the SS was undoubtedly worse than that meted out to any of other workers, they were truly at the very bottom of the pile and suffered accordingly.

To quote again from Major Panchett's book:

"The significant feature of life in the undernourished labour force was, as one inmate put it: "Within a month and a half of my arrival at Norderney Camp the average death rate was 2-3 per day. At the time of our arrival we had all been in normal health, but constant beatings and starvation diet had reduced us to an extremely feeble condition.""

The Netherlands and Belgium also provided volunteers for the OT and these were also encouraged to work in German factories, initially by an intense propaganda scheme, but then by the withholding of unemployment benefits from those unwilling to go. As Walter B. Maass says in his book The Netherlands at War 1940-45:

The workers-slaved after day after day marrying the vast quantities of concrete used in the construction, the French coast. Although this was on buildings to protect U-boats rather than Atlantic Wall fortresses, the basic work must have been very similar. He writes:

"When the party from Amsterdam arrived at their destination they were taken to a former French Army barracks at Roscoff, some 20 miles from La Rochele, and this was to become home for the young Dutchman for the next six months."

It didn't take him long to fall out with the authorities — he switched on a light in an unblacked-out room and was put in the cells for the night, but released the next morning.

"At 6 o'clock every morning the workers were taken by bus from Roscoff to La Rochele where they were put to work on the construction of the huge protective pens being built in a number of French Atlantic ports to house German U-boats during their periods of maintenance and re-arming between patrols. Several thousand men were to be employed over a period of some four years in the construction of these massive structures, similar to those built at Breest, Lorient and St Nazaire. Each pen, ten, were usually 12 at each port, was 350yd long, 170yd wide and had a height of 20yd. The roof was 12ft thick. Every pen could accommodate two ocean-going U-boats, providing total protection for 24 boats at any one time... The workers slaved day after day mixing and pouring the vast quantities of concrete used in the construction, the
work was dull and monotonous so that an environment was soon created where petty bickering was resorted to in an attempt to break the monotony. One day the conscript labour force, who considered they should be better treated than the slave labourers, staged a demonstration outside the OT offices demanding more food. The OT guards responded to this by firing shots over the heads of the protesters, who were shooting for more food or no work. This response rapidly put an end to the demonstration but the point must have been taken as the food provided to the workers was improved.

The scene at the construction site reminded the young man of pictures he had seen in children’s history books of the building of the pyramids. There seemed to be thousands of men crawling about like ants, or perhaps a colony of bees, all over the huge concrete structure that was to form the submarine base. Materials such as reinforcing steel bars, bags of cement, railway cars, wooden shuttering and supplies of water to mix the concrete had to be hauled up a huge ramp made of tree trunks.

The first time van Grieken went up the ramp he was terrified as the whole structure shook and rattled as though it were about to collapse; however, it was still there some six months later when he was leaving for Guernsey, so he concluded that the engineers who had designed it knew what they were doing.

The German decision to move the conscript workers was put into effect without warning. One day in mid-November 1941 an OT NCO read out a list of names, including Van Grieken’s and told the men to report at 6am for transport elsewhere. No details were given. Once more packed into a crowded train the workers were left to speculate on their likely destination. They had heard on the German news bulletin of the German attack on Russia and fervently hoped they were not going to be sent there, particularly with the winter coming on.

But fear was not betrayed by the fact that at every station they stopped en route, there were armed guards to ensure no one got off. They arrived at St Malo at about 03.00hrs the next morning, piled onto lorries and were taken to a barracks at St Servan, just to the south of the walled town of St Malo. After spending some uncomfortable days and nights there, once again a guard came in one evening, read out a list of names and told them to parade in the yard at 05.00hrs the next morning, with all their possessions. Again no destination was given.

‘At 5.30 in the morning, the Germans were ready to move off. This time they were taking no chances of anybody escaping. The conscript workers were marched off, with armed guards posted at 10yd intervals on both sides of the columns, and taken to St Malo harbour where they were loaded into the hold of a small coastal freighter — where they were going they had no idea and, once again, speculation was the main topic of conversation as the men wanted to find out what their masters had in store for them.’

After a first stop in Jersey, they finally docked in Guernsey and Gilbert soon found himself standing on the quayside in St Peter Port, the capital of the island, where he would spend the rest of the war years.

‘Soon some lorries arrived and the conscript labourers were loaded aboard. Their destination was L’Ancreuse, where they were to be accommodated in requisitioned houses and bungalows. The accommodation provided was Spartan in the extreme, providing little in the way of comfort. Each room, according to size, was furnished with up to six wooden double-tier beds backed with wooden slats as a base. The only bedding provided was a straw-filled pallisade and two Army blankets. No chairs, table, carpet, or other furnishing were provided.

‘Each morning the labourers were taken by lorry to Pleinmont where, high on the cliffs, they were put to work preparing a site for the construction of a concrete battery. The group Van Grieken was put to work with consisted of about 50 men, some conscript forced labourers and some slave labourers. The Moslem Algerians and Greeks who had been living in occupied France, had been rounded up in the German camps and, together with petty criminals found in French prisons, drafted into the OT for construction work. Their condition was pitiful. Clothed in little more than rags, underfed and denied any proper sanitary facilities, they were accommodated in what were, to all intents and purposes, miniature prison units and given the minimum of subsistence rations. The conditions under which the slave workers were housed were so bad that a German doctor, after an outbreak of typhus in one of the camps, warned the German authorities of the danger to their own troops if the sanitary conditions of the slave workers’ camps were not improved. The work the men were given to do was backbreaking. Only hand tools, pickaxes and shovels were provided for the men to prepare the site, located on a granite outcrop. Each swing of the pickaxe might loosen half a shovelful of granite, if that, so the progress of the work was slow. If the OT guards thought the slave workers, in particular, were not working fast enough they were more than ready to urge them to greater lengths with the aid of a pickaxe handle or a whip.

‘Each midday the conscript workers were lined up and given a ration of thin watery soup or, if for drinking there was nothing in it to spoon up. This “meal” had to be taken while working. There was no lunch break. The slave workers were also given soup which they had to drink out of any receptacle they could find; old food tins, a drained saucepan, anything that would hold liquid. The OT slavers could usually see the workers in the last stages of exhaustion trying to battle to reach the food lorry, but the old hands held back and waited as they knew the soup at the bottom of the container was thicker. The OT guards went off elsewhere for their food that was undoubtedly more substantial and sustaining than that given to the workers.’

At the end of each day the slave workers would be taken back to their camps, given their usual meagre ration and left to sleep on the floor of whatever building they were billeted in. The conscript workers fared better, although not a lot. Van Grieken and his group were taken back to their bivouacs and lined up in the kitchen which had been set up in a garage of the bungalow where they had been. There they were given a ration of warm food: vegetable, lentil or macaroni soup, sometimes boiled potatoes and vegetables with a tiny piece of meat. At the same time they were given a dried hard roll of bread which some bums would tear and, occasionally, a piece of meat. This was to be their breakfast for the next morning. They would take the warm food back to rooms to eat. After that they were free to do what they liked, but there was little attraction to be found at L’Ancreuse, particularly in winet ime, and because of the strenuous nature of the day’s work they had done, most of the workers simply went to bed to prepare themselves for another day of picking and shovelling at the battery site.

A French Volunteer

Another conscript/volunteer was a French electrician who had his own reasons for volunteering for OT employment, having made two abortive attempts to escape from France. He then volunteered at the Bureau de Placement at Orleans on 30 June 1942, for work in the Channel Islands, in the hope that he would be able to steal a boat and cross to the UK. In fact he managed to get away from France on 30 March 1943, after serving on the RPS (Royaux de Provence) on reaching England. As well as telling his story of what had happened to him, he was also able to give his interviewers a list of valuable information about the islands and their defences. In brief the story he told was as follows. From Orleans he was sent to Celle St Cloud near Paris, where he was lodged in immigrants’ camp for two nights before joining a convoy of workers who were going by train to St Malo. He found himself with some 300 Algerians, French and Belgians, the whole train being given over to these workers. The Algerians were, he said, ‘Pe’ain’s offering to the Germans’. They had been recruited either in North Africa or Marseilles and promised the earth in the matter of pay, food and lodgings, then packed off in cattle trucks to serve the Organisation Todt.

‘These miserable creatures were treated by the Germans worse than animals and were the chosen objects of the foulest brutalities. Any pains or discomforts suffered by the French volunteers were insignificant in comparison with the miseries of these Arabs.’

They arrived at St Malo on 4 July 1942, spent 24 hours in a barracks near the port and then left by night in a cargo ship, with about 150 on board. On arrival at St Peter Port (Guernsey), they were met by some uniformed OT officials, taken to the workers’ canteen—a building called ‘Rose Mare’—and given a meal. Then they were taken to a bare unsanitary house behind a church where they stayed for some days. They were then searched and issued with a list of names of people and a similarly bare and deserted house in the south of the town.

After two days they were assigned to various sub-contractors’ firms. He went to work for Selbach of Kollenz. This company was not a building firm but rather a supplier of all types of building materials. It was in fact the main builders’ merchant for the OT on the island and kept vast stocks of cement, timber, iron and other items at various dumps throughout Guernsey. Initially he was employed as a labourer on the upkeep of the permanent way of the narrow gauge railway that the Germans had laid between St Sampson and St Peter Port to be used exclusively to move building materials. As he was moderately well educated he was soon given an office job and spent his time between the firm’s two offices in St Peter Port and St Sampson. There were about 70 OT men in the firm who were uniformed; however, only 15 had been with Selbach previously.

Above: French colonial troops, now prisoners of war but working for the OT, together with other OT workers, marching on their way to start work on the St Brelade tunnels, Guernsey. They are watched by troops of the German garrison, who are standing in front of St Brelade’s School. The photo was taken in the summer of 1940, not long after the occupation began. Gilbert van Grieken
Spanish Nationalists
Among the forced labourers were several thousand Spanish Nationalists who had fought in the Spanish Civil War against the Republicans. One of these was Juan Taulé who had escaped over the frontier into France and was "given" (his own word) to the Germans by the French authorities in late 1940 or early 1941 for the export of French POWs. He was initially employed working on the submarine base at La Rochelle, but after six months he was transferred to Germany and billeted in Elizabeth Castle, St Helier. First of all, he worked on sea walls around the castle, then moved to various other locations, staying longest at Camp Ulric, Bois de Orle, where he worked on bunkers and sea walls at La Garrière Point, St Ouen’s Bay, and other places. Working conditions were not good and food was scarce, especially in 1943-44. Fortunately the foreman who was with the gang all the time was, as Taulé put it: "one of the good" Germans and treated them reasonably well. "We were lucky to get him." Juan Taulé actually worked for the German company Kell & Co., who had set up a branch on the Channel Islands, in line with many other German building firms. "Compared with most of the OT work force," comments Michael Gmins, "the Spaniards were in a class of their own; coming from all walks of life, there were clerks, tradesmen and even doctors in their ranks. The OT operated a "divide and rule" policy and would offer inducements of pay and better living conditions to the Spaniards if they would cooperate more closely. Whatever did or did not open a question, but certainly in the Channel Islands a number followed that rule. . . . in 1943 they were transferred to England."

Which is where Mr Taulé still lives.

Local Labour
The Channel Islands perhaps provides a microcosm of the situation that faced many ordinary workers in many parts of Occupied Europe, in that, whilst normal civilian jobs were scarce or badly paid, the OT could offer good wages for even the most mundane of tasks (such as lorry driving). In order to try to stop men from seeking to work for the Germans, the States of Jersey Department of Labour, for example, created work schemes, such as forestry and road construction. However, the Germans simply imposed a ceiling on the amount that such workers could be paid, making it virtually impossible for anyone to maintain a family on the size of the wage packet offered. One man, Casimir Sand (married — £2.50), who worked when the OT arrived it could offer jobs at £5.00 a week. It is hardly surprising that some 530 local men volunteered to work for the OT. And there was another reason too, as Michael Gmins explains: "Known in the vernacular of the day as 'working for the ferries' and from whatever source the local labour came, employment by the OT gave access to a large pool of commodities that were otherwise unavailable, and at the end of the working day nearly everybody took something home with them, be it tools or hallots of scarce petrol or diesel fuel."

However, this form of 'respectable stealing' from the Germans had an effect on island life and a letter from the Liberation Forces to the Under Secretary of State at the War Office in June 1945, it was stated that: 'the whole moral tone of the Island has been weakened — stealing is prevalent.' [PRO Document WO 195/2131]

Mr Prigent, a young 18-year-old builder who lived in Jersey at the time of the occupation, was called up with other young islanders to go to work for the OT. In a tape (No. 10171/3), which he recorded for the Imperial War Museum in 1989, he said:

"Being a builder I was called up to go and work for them. It wasn't a gun emplacement but they were putting these 24 guns down on a beach and they had to get them from the harbour to St Peter's Valley. They were going to bury them under ground and then cover them with concrete. They used to spend all day at this. It happened to be a cold November day when I got there. Everybody — not everybody — three or four of the chaps were standing round a brazier warming their hands. A couple of Irish chaps were playing cards. This German soldier said to me: 'You come, you have to paint the tanks.' I knew I could paint them but there were already three painters in the shed, so I said 'I'm no painter, there's one, two, three painters in the shed. Why should I paint them while they are sitting around the fire?' So the officer came, with red stripes. I said, 'I couldn't care less. I'm no painter. I have been called up. I'm a builder, plasterer, concrete worker, not painting.' So we had a few words. I gave him back the paintbrush and the bucket of red oxide paint. I decided to walk home. At nine o'clock that evening I was arrested as an unauthorised troublemaker. I was taken to St Helier and I was thrown in the prison in the harbour I met three or four other Jersey lads and this Walter Gallinon that I went to school with. We went to Guernsey. We stayed overnight in Guernsey. The next night, on another boat, we went up to Alderney. A year or so before I was sent to Alderney they had called up young chaps to go over to Alderney to work and they had a German ration. They got double pay working in Alderney than if they were working in Jersey. Then I was classified as one of those. When we arrived at the docks these chaps went one way, guard was waiting down the bottom of the harbour and the door was closed and so I was thrown alone up to an OT farm. So I thought. 'There's nobody in here I know.' They were all Russians, Poles, French."

After working on the farm for some weeks, Prigent was sent to work in the German officers' canteen, scrubbing floors, peeling potatoes. Later he worked in a quarry breaking stones, then digging slit trenches around Braye Bay. Eventually, along with other workers, he was told that if he was in sound as though he was able to get away with things. However, I believe that may just be the bravado of youth talking. Certainly he was beaten on numerous occasions and on one occasion, he says, in the face with the butt of a guard's rifle and lost his front teeth (he didn't get them fixed properly until after the war):

"One night I got out of my bunk too slow; I lifted my arms and started to put on my shirt. I thought I was going to hit the guard. Then he bit me in the nose and threw my arm over the butt of his rifle and took my teeth out... If you were dragging your feet when you marched to work, and most of us did, drag our feet because we were all exhausted and starved, they used to come along with a whip and whip you to make you march faster. If you were working too slow in..."
the stone quarry they used to come along and shout at you and whip you... Some of the prisoners, if they had been caught doing something wrong during the day at roll call they were brought out in front of us. They were whipped and kicked around the square where we stood. Then, when they collapsed, the guards used to carry them to a wooden tool shed. You never saw those chaps at roll call again... You thought, "in a couple of days time they'll be back," but people just need to disappear."

Slave Labourers

"Very little distinction seems to have been made by the Germans between Russian war prisoners and forced labour mobilised in the towns and in the villages from the civil population in occupied territory. They have all been treated with the same brutality, undernourished, a very large proportion worked to death and many beaten to death."

That is how MI19 (RPS) report 2292 on 'Forced Labour — Prison Atrocities' dated 25 July 1944 begins. It was compiled from the experiences of 14 Red Army soldiers and Russian civilians, all of whom without exception told of torture, starvation and very hard work. However, they also said that the Germans had slack control over both POWs and forced labour, not only when they were still in occupied Russian territory but also after they were taken to France and the Channel Islands.

"In Alderney, Jersey and Cherbourg, many prisoners succeeded in escaping four or five times and to keep in hiding for months on end in semi-dismantled barracks in Cherbourg, with French farmers in the villages or with English people on the islands. Whilst they were in hiding they were treated well and on no occasion were they ever denounced. When recaptured, particularly in France and the islands, the prisoners were given very hard sentences. In addition to the beatings on escapes they would be sentenced to 25 to 50 lashes a month and to three months' solitary confinement in one of the prison dungeons on 200 grammes less than half a pound of bread a day and no other food. Stealing was a further method of staying alive. This consisted of digging up a few potatoes and eating them raw or sneaking away in the shore to find mussels or winkles. Occasionally a German foodstore would be raided and food stolen. Those who did not steal, died, which accounts for the large proportion of deaths (over 50% in Alderney, 40% in Jersey)."

"Why the Germans should have allowed such a large proportion of workers doing essential work for them to die was answered by the informants as follows: 'We were treated worse than cattle. Our term of usefulness was generally accepted by the Germans as being six months. After that we were expedited. They tried to get out of us every ounce of labour and energy they could out as little food as possible. If we managed to carry on for a month or two months well and good, and if not we went to school.'"

This explanation is not altogether complete for, though it is true that when a Russian prisoner fell ill hardly any medical assistance was given to him, beyond placing him in a separate barrack and excluding him from work, when 800 workmen on Alderney and 600 on Jersey were too exhausted to work, they were all starved. At St Malo and at Cherbourg, exhausted Russian prisoners were given three to four months' improved food and no work to enable them to recover. They were sent back to work. Furthermore several of the informants were gassed or maltreated by German guards. Some of these were taken to hospital for treatment and were operated on by German doctors. In at least three instances men were sent to Paris for a further operation, yet, while taking this amount of trouble over the injured, no measures were at any time taken against the guards who crippled the workers and caused this extra work to the German medical organization."

"The explanation according to some of the informants is that the cases quoted are the exception and not the rule, and the fact that a few German doctors were sufficiently humane to take an interest in the Russian patients, does not affect the huge proportion of deaths. Moreover, if a short treatment can revitalise sturdy workers there is no reason why they should not be treated for a certain period so that they may be further exploited."

Poor Equipment

Political prisoner Odd Nansen, whom we met in an earlier chapter up in the snows of northern Norway, remembers not being very impressed with the work of the OT volunteers:

"When one asks them at it, one realises that the result can be no great shakes, either for quantity or quality. After a close look at their tools, one understands even more. Most things in the first place, they haven't got. There are no decent hammers. All they have are some things like Lilliputian sledgehammers. None of the axes have an edge and are unmanageable. There are no decent joiner's tools. Everything is the cheapest kind of Nuremberg trash, as seen called it in the old days. It's ordered and delivered by the bunch. We saw it lying in open railway trucks in Trondheim and elsewhere. A percentage of it was ruined, nasty or smashed. There is a shortage of decent nails. They have only certain sizes which they have to make do with. But above all are they short of decent material. Ream, crooked logs and the cheapest kind of boarding material are all that can be had. Those we have to fetch from old abode snow-shelters that are being pulled down on other hills not far away. Presumably they are last winter's abortive attempts to keep the road open. This year they'll try again. I hardly think it will come off. According to report they're planning to build 21km of snow-roads in all. An Oslo farmer has it in his head to do that as well, but not on it as well."

"They're a melancholy-looking crowd. Spiritless and gloomy, lack-lustre, gangling and crook-backed they go around, no they swarm around, to all appearance about

as aimlessly as ants in and around an ant-hill, only a good deal slower in their movements. Perhaps they rather suggest another insect — in a glacier. The Grini temple was the speed of an express train compared with this. Grini efficiency might be set up as a pattern for these people."
Right:
Cæsær. Work is still in progress on the top of the massive casemate. They were heavily bombed and after the war there was an attempt to blow up the bunkers. Cæsær is now almost totally in ruins, as is the Lützeland (the control tower). Bundesarchiv

Below:
Massive cranes were needed to replace such guns as the one at the Batterie Lindemann, Pas de Calais. The three 45-ton guns were called Anton, Bruno and Cæsær. Bundesarchiv

Opposite top:
Batterie Lindemann in all its glory. These impressive structures were opened in 1942, despite not being fully completed and became a symbol of the strength of the Atlantic Wall, being used in much of the Nazi propaganda material. Bundesarchiv

Opposite below:
Mixing cement was a most important step in the building process. As the table shows (page 50), the OT mixed and poured thousands of tons of concrete in building the Atlantic Wall. Bundesarchiv

Below:
Camouflage netting being hoisted up to cover new constructions on the Atlantic Wall. Note the OT armband on the overseer’s arm. Bundesarchiv
Chapter 5

The Types of Defensive Structures

Economy of Force

In a military culture so dedicated to the offensive, it may seem strange that the Germans were not averse to building defensive fortifications. However, they reasoned that by doing so they would be able to hold a particular line with a relatively smaller force than would otherwise be necessary. 'Economy of Force' was therefore a fundamental principle in designing fortifications. In other words, such fortifications existed not to protect their soldiers, but rather to enable them to fight more effectively and by doing so they were able to tie down fewer men to a static defence, so that the bulk of their forces could still manoeuvre. This principle was applied to a certain degree in designing the Wall, but the arguments over where the immediate counter-attack forces, that is to say the panzer manoeuvre force, would be located, led to major problems.

Characteristics of Fortifications

Design Principles

During the last year of the war, the USA produced a Handbook on German Military Fortresses (TM-E 30-451 dated 1 March 1945), which was issued to US troops who would be serving in North-West Europe. Chapter V of that manual dealt specifically with 'Fortifications and Defences' and provided an excellent summary of the main types of such fortifications and defences as were found in the Atlantic Wall. Initially, however, it dealt with the Wehrmacht principles of design and construction. The basic considerations were fire effect, cover and concealment. Fire effect was top priority, whilst natural concealment was used as much as possible, by blending into the surrounding terrain. Where fire effect was not a consideration — for example with personnel or supply shelters — then fortifications would be completely below ground level, or as low as the local water-table permitted. In order to present as small a target as possible to high-angle fire and bombing, emplacements, pillboxes and casemates were built no larger than was necessary to allow crews to operate their guns. Nevertheless, when one considers the massive dimensions of some of the coastal artillery guns, then the size of such casemates was correspondingly enormous.

Below: The basis of all bunker design was the mesh of reinforcing rods, as can be seen in this typical example under construction. Note also that the pipework for the ventilation system as well as the chimney for the stove are fixed into position before the concrete is poured. CIOS Jersey.
Construction
All permanent, fortress-type works and many field works were
to be made of reinforced concrete. Steel bars were used for
reinforcing, running in three dimensions so as to form 25–30cm
cubes. Rod diameter varied from 10mm to 15mm, with
the most common size being 12mm. Rods were hooked at each end.
In this construction, see the table below that lists the amounts of
cement, rod steel and sheet steel used in the various structures.

Quantities of Basic Components Used

<table>
<thead>
<tr>
<th>FORTIFICATION</th>
<th>CONCRETE (cubic metres)</th>
<th>ROD STEEL (tons)</th>
<th>SHEET STEEL (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casematte for 4.7cm Pk</td>
<td>830</td>
<td>40</td>
<td>6.2</td>
</tr>
<tr>
<td>Two-section bunker</td>
<td>660</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>Gun emplacement for 5cm gun with gun shield</td>
<td>535</td>
<td>23.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Anti-tank gun bunker with cupola and observation post</td>
<td>66</td>
<td>27</td>
<td>4.1</td>
</tr>
<tr>
<td>Ammunition bunker</td>
<td>740</td>
<td>34</td>
<td>5.7</td>
</tr>
<tr>
<td>One-storey battalion command post</td>
<td>990</td>
<td>49</td>
<td>8.7</td>
</tr>
<tr>
<td>Two-storey regimental/battalion command post</td>
<td>1,480</td>
<td>68</td>
<td>9.1</td>
</tr>
<tr>
<td>Command post for supply company</td>
<td>850</td>
<td>43</td>
<td>9.6</td>
</tr>
<tr>
<td>Field artillery embrasure</td>
<td>1,330</td>
<td>63</td>
<td>15.0</td>
</tr>
<tr>
<td>Infantry-gun embrasure</td>
<td>385</td>
<td>17</td>
<td>4.1</td>
</tr>
<tr>
<td>Headquarters signals bunker</td>
<td>1,100</td>
<td>53</td>
<td>10</td>
</tr>
<tr>
<td>Section bunker with observation post</td>
<td>485</td>
<td>23</td>
<td>3.7</td>
</tr>
<tr>
<td>Armoured machine gun position</td>
<td>610</td>
<td>30</td>
<td>5.3</td>
</tr>
<tr>
<td>Six embrasures with tan cupola</td>
<td>1,730</td>
<td>63</td>
<td>7</td>
</tr>
<tr>
<td>Large medical bunker</td>
<td>1,360</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>120° embrasure with reserve room</td>
<td>1,080</td>
<td>52</td>
<td>11</td>
</tr>
<tr>
<td>Six-man bunker with ammunition magazine</td>
<td>500</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>15-man bunker</td>
<td>570</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>60° embrasure for field gun</td>
<td>495</td>
<td>20</td>
<td>3.4</td>
</tr>
<tr>
<td>Embrasure for 7.5cm gun</td>
<td>340</td>
<td>16</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Some field works were, however, built of masonry, bricks or
timber. As the drawings show, steel was also used in concrete
structures for beams, turrets, cupolas, gun shields, machine gun
loopholes and doors. These were prefabricated and given
code/model numbers so that they could be more easily ordered.

Above right: Lifting one of the heavy metal machine gun posts into position.
They had six slots for all-round vision and weighed over 3 tons. Entry was via
a door in the back of the upper half, just 50 x 35cm! A petrol-operated blower
provided ventilation. The top half had armour up to 12mm thick, whilst the
lower part was only 8mm thick, but was of course below ground level.

Right: Some bunkers remained unfinished when D-Day came. This one was
photographed by a British Army cameraman somewhere in Normandy, 17
June 1944. NMH — H021734

Types of Fortifications
In general terms, the Wall fortifications can be divided into the
following categories: open emplacements, pillboxes and
casemates, shelters and, lastly, observation posts (OP). Of
course obstacles of all types, such as anti-tank ditches, ‘dragon’s
teeth’ and so on, including minefields, must also be included.

Open Emplacements
These were known under the generic name of the Tobruk Type.
From their experience in North Africa, the Germans had
derived a type of open, circular pit, lined with concrete, which
they called a Tobruk. Subsequently Hitler’s staff issued orders
that Tobruk pits were to be used as defence works in the field,
and instructions on how they should be built were distributed
down to divisional level. Such a pit comprised a concrete
weapon chamber built entirely underground, with a neck-like
opening at the top. The concrete was generally reinforced and the pits varied in size depending upon the weapon to be mounted within them. However, the diameter of the neck was always kept as small as possible so as to reduce the risk of direct hits. A Tobruk did not have a concrete roof as this would have given away its position to the enemy, instead a board of irregular shape was used as a lid and camouflaged the circular opening (it also kept out the rain).

The most common type of Tobruk was designated the Type 58c and known as a Ringstand — because of the rail around the inside of the neck, which provided a 360° track on which to mount a machine gun (see Figure 1). Note also the underground ammunition chamber and entrance also underground. Figure 2 shows a 50mm mortar emplacement (Type 61a), which had a larger Ringstand, a concrete base on which to mount the mortar and a separate ammunition chamber. Figure 3 shows a Panzerstellung, which used a Tobruk as a base on which to mount a tank turret — normally that of a captured French Renault 35, which mounted a 37mm anti-tank gun and a co-axial machine gun. The turret was bolted to a circular metal plate, which was rotated by hand along a 360° track, giving all-round traverse.

**Pillboxes and Casemates**

In accordance with German doctrine, although there were many concrete pillboxes and casemates in the Atlantic Wall, they were mainly supported by even more open field works. The pillboxes themselves had walls and roofs up to 2m thick, as did the casemates which housed the large caliber guns. They also normally had a stepped embrasure to prevent bullets ricocheting into the gun opening, while in some cases a steel gun shield would be added to close the opening. Some examples of pillboxes and casemates are shown in Figures 4, 5 and 6.

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Above right: A Type 603 pillbox. Source: US Army training manual TM 5-45 dated 1 March 1945

Below right: A Type 655 casemate. Source: US Army training manual TM 5-45 dated 1 March 1945

Below: A Type 677 casemate. Source: US Army training manual TM 5-45 dated 1 March 1945
The 600 Series
A new standard bunker design was created for the Atlantic Wall, namely the 600 series. These were supposedly bombproof, constructed of reinforced concrete, with walls between 2m and 3.5m thick. The series included designs for coastal artillery and below are descriptions of three examples of this series.

The Type 630 pillbox was designed to hold a light anti-tank gun, with a 2m concrete roof, sides and front wall, but the rear wall was some 8mm thinner. Close defence was provided by a machine gun firing through a loophole at the rear, whilst there was a second loophole at the bottom of the stairway from where a defender could fire at anyone trying to get in. A Tobruk pit (Ringstand) was built into the front wall as an OP/MG post. Of course there were many local designs as well where the pillbox was specially modified to suit local conditions. Also there was an all-steel ‘mobile’ pillbox (weighing just over 3 tons!) that could be placed anywhere suitable. This was constructed in two halves, then welded together. The top half contained the aperture, armament, air vents and entrance door. The steel plate varied in thickness from 12cm near the aperture to 5cm on the sides and top of the top half, while the bottom half was only some 2cm thick, but was designed to be dug in and thus well protected by the ground.

The Type 685 casemate was designed to hold guns of 21cm calibre. It had a 3.5m thick roof, but was of simple design, with a gun room (with recesses for ammunition) and possibly separate living quarters for the gun crew. The embrasure allowed for 60° traverse and 40° elevation for the weapon. There were a whole range of such casemates (e.g. Types 683, 684, 686, 688, 689, 690, 692 and 694) with differing amounts of traverse to suit the weapon housed and varying from 90° to 120°. Additional protection and camouflage could be added by banking up the sides and by coverting the top with a layer of earth.

The Type 677 casemate was designed to enable the gun it housed to deliver flanking fire. To do this a wing wall was built on the side towards the enemy so as to shield the embrasure from enemy fire, the length of the wall depending on local conditions. The Type 677 was for an 8cm gun or larger.

Below: This Type 677 casemate at Cowes is under new management, a Canadian 30mm Oerlikon AA mounting having taken up residence on top of the casemate which still houses an 8.8cm anti-tank gun. Ken Bell, National Archives of Canada PA 140856

Above: Is it a house or is it a gun emplacement? Largest of the guns on the Channel islands were those of the Mirus Battery, which comprised four reconditioned 30.5cm guns of a World War I Russian battlehip. These were located at St Saviour's, Guernsey. "NM — RF 29397"
Custom-built casemates

While the two types shown in the drawings are but two of the many standard casemates, there were of course even more 'custom-built' casemates for such massive guns as those of the Sirus Battery in the Channel Islands and one can imagine how much labour, effort, steel and concrete went into their construction.

Camouflage

Pillboxes, casemates and the other works were all camouflaged, where possible, by banks of earth at the sides and on top. They might also be hidden by enclosing them in wooden buildings, with the gun being fired through false doors or windows, though such arrangements were never allowed to interfere with the gun's field of fire.

Shelters

It was clearly desirable to have adequate shelters for all troops manning the fortifications. Generally, these were built in rear of the fortified line to house the reserves and also in individual defensive positions to house the troops manning the installations. Some personnel shelters had room for two sections (roughly 20 men), but the norm was no more than 10 men in one shelter for obvious reasons. Personnel shelters could also be used as headquarters, command posts, medical stations or signal centres. However, the types provided specially for such purposes had differing designs, size and number of interior compartments and other modifications.

One of the most common types of shelter was the Type 621, designed to hold an infantry Group (squad/section) of 10 men. Built of reinforced concrete with a roof thickness of 2 in, it was designed to be completely underground, with a covering of at least 30 cm of earth on top. Seventeen steel I-beams, each 4 m long, supported the ceiling above the interior compartments. Steel plates resting on the bottom flanges of the I-beams provided an all-steel ceiling. Shorter I-beams supported the ceiling over the doors and entrance stairs. A camouflaged 'hat top' stretched over the trench at the rear, which provided access to the entrance stairs and concealed it from the air. The flat top had a row of hooks cast into the roof along the rear side of the shelter to secure it. A Tobruk pit was built into one of the side wings for observation. There were two entrances/exits provided to enable the section to deploy rapidly. Each entrance was covered by a machine gun, firing through a loophole in the interior wall at the foot of the stairs. Both entrances converged into a gas lock which was sealed with three steel doors about 2.5 mm thick, which opened outwards. To make the chimney gas-proof, the vertical shaft was continued below the stovepipe and curved outwards into the space used for the emergency exit. Thus, a grenade dropped into the chimney did not enter the shelter but fell outside the sidewalk to explode harmlessly. Four ventilation shafts opened into the rear wall between the entrance stairs, two of which were dummy doors to mislead attackers trying to introduce smoke into the ventilating system to drive out the occupants. The blower was driven by an electric motor and could be hand operated in a power failure.

To communicate with those inside, there was a telephone at the head of the entrance stairs and both a telephone and speaking tube in the Tobruk. Also, a telephone cable, deeply buried, led to other nearby installations. Sometimes section shelters were adapted to include a steel turret for observation and/or an externally mounted machine gun on top of the Tobruk. However, it was laid down that troops were not to fight from their shelters but just to use them as protection when not engaged in combat.

Figure 9 shows a typical anti-tank gun shelter, designated as Type 629. The accommodation for the personnel was similar to that of other personnel shelters, but there was also a separate compartment for the gun and its ammunition. Double doors on this compartment enabled the gun to be rolled out and up a ramp (slope 1:6) to an open emplacement to the rear of the shelter from which it fired over the top of the shelter. It had two Tobruk pits, each with a machine gun to support the anti-tank

Top: This machine gun embrasure was on high ground near Dieppe, located so as to protect the entrance to the well-camouflaged bunker. Ken Bell, National Archives of Canada

Left: Painted with disruptive camouflage, this bunker is on the eastern headland at Dieppe incorporates a separate entrance to a Tobruk Ringfort. Ken Bell, National Archives of Canada

Above: A slightly damaged Type 622 accommodation bunker at Capriquet now housing Canadian troops. Ken Bell, National Archives of Canada


gun, and they were connected by telephone and speaking tube to the gun crew’s quarters. The shelter was also equipped with a periscope. Figure 7 shows a combined shelter and emplacement, designated as Type L. 409 (the L standing for Luftwaffe), which was a personnel shelter with an open gun emplacement on the roof. This type was for a light anti-aircraft gun and its crew, but there were other variations in the L. 400 series, for example the L. 405 radar and the L. 411 searchlight, while the shelter below could be adapted for other uses, for example the L. 434 battalion command post or L. 407 ammunition magazine.

Finally there were Supply Shelters, designed to hold ammunition, rations and other supplies, and drinking water. These were normally entirely underground and would have walls 2m thick, just one entrance, no emergency exits, nor loopholes, nor Tobruks.

Observation Posts
A typical observation post (OP) is shown at Figure 10, of the kind used for Army coastal artillery — Type 636. It had separate rooms for observation, plotting, radar, officers’ quarters and other ranks’ quarters. A Giant Würzburg radar set was mounted on the roof, while there were at least two machine gun loopholes covering the rear entrance (one in the exterior wall, one in the interior wall at the foot of the stairs). The quarters were for two officers and nine men, but as this was insufficient to cover all those who would be working in such a post, a further personnel shelter would be built nearby. Some of the coastal artillery observation posts built on the Channel Islands were far more elaborate and will be explained in more detail later.

Stützpunkt 37H
Not far from the village of Wassenar on the Dutch coast, which lies between Scheveningen and Katwijk, the Germans built Strongpoint 37H (or Wassenarze Slag in Dutch) on what they called the free Küste, that is to say, the less well defended land between two larger strongpoints. The small strongpoint is typical of those built in areas of ‘free coast’ and is still largely intact — especially the subterranean passageways and command/observation post. It is open to the public in the summer. It was one of the few German coastal positions in Holland to see actual combat, when, on 28 February 1944, six Free French commandos came ashore to reconnoitre the strongpoint. It is still not clear exactly what happened, but probably one of them activated an alarm signal and they had to withdraw into the sea. Their subsequent rendezvous with a British MTB went disastrously wrong and all were drowned. Their commander was Charles Trepel and a monument now recalls their brave action.

The strongpoint comprised three concrete bunkers (each 3m thick): No 8698 — a Type 612 Schützenstand for Landes und Sturmbahnschützen ohne Nebentarn, armed with an 8cm Feldkanone 30(t), No 8699 — a Type 676 Kleinhanschenfstand für 8cm KwK, No 8697 — a 4.7cm Festungsgranit (r). For all round defence several Tolbruk pits were added. Two of them of the 216 Type were armed with heavy machine guns. In the centre of the strongpoint was a command post/observation post, with a covered observation tower. The strongpoint commander had his own bunker, which housed himself and a messenger.

This post had a 120-man garrison which on 24 May 1944 comprised one officer, three NCOs and 19 men of the 31st Jäger Regiment (Luftwaffe); three NCOs and 21 men of the Festung Stamm Abteilung (fortress troops) manning the antitank pieces (4.7cm Pak and the 5cm KwK); three NCOs and 12 men of VB3 Artillery Regiment 16 (VB — vorgeschobene Beschattung [advanced observation]); and 56 men of 14 Company, 31st Jäger Regiment, manning two mortars. These troops went to France in August 1944 and were replaced by an officer, seven NCOs and 43 men of No 1 Company, 12th Infantry Regiment, plus two NCOs and four men of the artillery from the 21st SS Regiment.

The troops lived in several concrete living bunkers, which were of lighter construction.
Intensive examination was carried out and it was found that all three direct hits had been made by bombs of 500kg in weight. The building was so badly damaged that it could not be repaired. The initial thinking was that the shelter had not done badly, having survived two direct hits. Receiving these direct hits on a structure with an exposed surface of less than 10m x 15m was considered 'somewhat unusual'.

Casemate

Another interesting example is the explosion of a heavy bomb (probably 250kg or heavier) which exploded in the air about 2m outside the Operations Room. From the fragmentary reports which were translated and published for the US Army in 1947, the report was entitled: 'The effect of bombs and heavy naval gun on the fortified defensive system of the Atlantic Wall.' Schmetzer had used not only the detailed reports which he had received, but he had also kept in touch with the OT, the chief naval fortress engineer staff and the staff in Luftlerte 3, and had carried out his own inspections of constructions with walls of reinforced concrete 2m thick or over. Here are some examples of the results his report listed.

Personnel Shelters

As far as Gruppe shelters were concerned, he cites the case of a normal shelter made of 'faultless quality' reinforced concrete 2m thick, occupied by a sergeant and eight artillerymen, which had received three direct hits during an air-raid. The first hit one of the short walls (about 15m in size) and:

'At the explosion the whole constructionumbled and about three-quarters of the contents were thrown across the room. Nothing was left of the table. At the same time the electric lights went out, small pieces of concrete fell down and the room was full of dust which made breathing somewhat difficult. A candle was lit. After a short time, when the dust had settled, the battery was observed, but it was not possible to move the bodies. The air was so thick that breathing was difficult.'

About 5-10 minutes later, the second direct hit landed on the unsupported part of the roof, in distance only 50cm from the first. The engine was destroyed, but the second direct hit was much less destructive than the first. To the men in the shelter, the damage appeared quite insignificant.

After a further lapse of about 10-15 minutes, the third direct hit landed, again on the roof, approximately 3m from where the second bomb had struck. About 1.5m from the short wall opposite and not much further from the long wall. The sergeant and three of the men, who were sitting with their backs towards the short wall, had been hit first of all, that declared that everything had happened exactly as during the first two direct hits. They were convinced that the shelter attack as before. It was only after the candle had again been lit and the dust had settled that they saw 'The roof coming right down to the floor', and discovered four of their comrades dead under the debris, the fifth injured by a fragment of concrete and a large gap hiding in the roof.

The entire battery terrain was full of bombs craters, some of which had undoubtedly been caused by 1,000kg bombs. During the entire period, the total casualties in dead, wounded and sick amounted to only 25%. The battery had never been attacked so strongly as this, and a protection of these two walls by means of protective walls sunk to an appropriate depth had been demanded on

precuations system functioned extremely well. In spite of numerous direct hits, one of the strong shelters for gun crews, ammunition, command and observation posts was not seriously damaged during the Normandy campaign of 1944, the final answer to the question was given when it was found that the shelter had not done badly, having survived two direct hits. Receiving these direct hits on a structure with an exposed surface of less than 10m x 15m was considered 'somewhat unusual'.

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principle. On account of the increased amount of work and material involved, the OTI declined to carry out this reinforcement arguing that they could build more emplacements of this type in the short time available, which would be according to the Pfiiffer's intentions. Added to that was the impossibility to fit these high structures which towered unnaturally into the sky and had to camouflage them sufficiently. Without considerably increased forces, means, time and special installations which were not available owing to the circumstances ruling at the time, a solution could not be found to eliminate these serious weaknesses.'

These are but three extracts from Schmetter's report which contains many other examples of the results of bombing and shelling against the Atlantic Wall. In 1947, captured Generalleutnant Max Pemsel commented upon Schmetter's report thus:

'A very accurate report by an expert for specialists on the question of the resistance capacity of the fortified defence installations. The heavy fortified defence installations of smaller size have proved their worth as shelters for men and ammunition and also as observation posts. As far as defensive installations were concerned, the little Tobruks were particularly popular.

'The large emplacements for guns have proved disadvantageous — as had been anticipated. Wherever the guns were not in emplacements but were well covered and camouflaged they remained undamaged for a long time. Their great advantage was that they offered only a small target but were able to fire in all directions. Time, labour and material for the construction of the emplacements had been saved. As the guns in the emplacements were to be as flexible as possible, the emplacements were too large and offered a good target to Naval Artillery. The more the emplacements were turned away from the sea, the greater the extent to which a wide seaward field of fire was sacrificed.'

Marineinselände

Amongst all the types of structure built for the Wall, some of the most amazing were the tall, reinforced concrete, observation towers built on the Channel Islands, a number of which still remain today. A staggering 22 were planned, although only nine were eventually built, seven of which are still standing. These futuristic towers had multiple observation slots facing out to sea — once on the Wasseners on the islands, whereas the norm for those observation towers built elsewhere on the Wall was just two. The reason for this was that each slot dealt with only a single coastal battery, so more slots made control much easier.

Other Major Structures

As well as the structures which were integral parts of the Atlantic Wall defences, other strange new structures also began appearing, for example:

'The Fifteenth Army had to defend the coastal sector between Ostend and west of Le Hafte. About the summer of 1943 it was reported to von Rundstedt that huge structures were being erected in the area by the Todt Organisation, the object of which was unknown to it. The structures were set up so secretly that not even the Commander-in-Chief of the Fifteenth Army dared enter the building area. It was natural that the Army should raise a protest about building going on in its area without being informed about it. It further reacted against those objects because they only invited enemy bombing attacks and thus endangered troops in the vicinity.'

Not even von Rundstedt and his staff had any idea either, and so they quizzed OKW who, after expressing some surprise that they had not been informed, promised to rectify the situation but only orally, so tight was the secrecy. The relatively new buildings were of course the sites for the new V-weapons, which would not be ready for use against the UK for some time, so it was essential to keep any knowledge of them away from the Allies. Somewhat later Hitler ordered that von Rundstedt should be included in briefings regarding the tactical employment of these weapons and a special staff was put under his orders, which, according to Günsler Blumenrett was given the misleading title of 'General Headquarters for Special Employment'.

Despite all their precautions, the construction of such massive structures did not go unnoticed by Allied agents and they soon became targets for the Allied Air Forces.

"After some nasty experiences Western Command prescribed that the field emplacements of the V-1 should be built more simply and naturally, in order not to be so noticeable, Hitler agreed, and the construction of the emplacements for these weapons was begun in a new form. From 80 to 100 such positions were erected up to the beginning of the invasion in 1944, between Calais and Le Hafte."'

Notes

1. Source Die Organisation Todt, Frank W. Stdler
2. See, for example, the Naval Signal Headquarters built in Guernsey and mentioned in Chapter 17.
3. World War II German Military Studies, Volume 12.
5. Ibid.

How Much Did the British Know?

In his book Resistance, M. R. D. Foot, who also wrote the official history of the SOE in France, mentions the following spectacular coup:

'It hardly ever happened that a resister was able to get direct evidence of Axis intentions through nose and again this could be done. The locus classicus was the theft, by an alert French house decorative, of the plan for the Atlantic Wall, which was in London before a single block-house described in it was built.'

Foot goes on to say that he could testify as to the invaluable nature of these plans, saying that he had used a 'well-thumbed copy when helping Combined Operations headquarters to plan raids on the Channel coast'. Henri Michel in his book The Shadow War — Resistance in Europe 1939-45 also mentions this spectacular theft, but adds a caveat that there could be no certainty that 'these were the authoritative plans, that they would not subsequently be changed or that the Allies would realise their importance and make good use of them'. Certainly it would appear that they did. Indeed General Omar Bradley went so far as to say later that 'securing the blueprint of the German Atlantic Wall, was an incredible and brilliant feat — so valuable that the landing operation succeeded with the minimum loss of men and material'.

The full story of this remarkable theft is told by Richard Collier in his book Ten Thousand Eyes, in which he explains how, in May 1942, Rene Ducat, a Caen house-painter and at that time an ex-baby French spy, saw an announcement that the local Organisation Todt was inviting bids from painters and decorators to refurbish its offices. He applied, ensuring that his bid was the lowest, that everyone else would be excluded, and was given the job. During his first interview with Bauleiter Hugo Schneider, he noticed a pile of maps and documents on the office desk and was amazed to be left on his own while the Bauleiter spoke to one of his staff. On the top of the pile was a map on which it was said in large red letters: Sonderzeichnung — Secret Orders. Map: Top Secret. Ignoring the horrendous risk of being caught red-handed, Ducat took the map and stuffed it behind a mirror on the office wall. Later he was able to retrieve it during his redecoration of the offices. He was greatly helped by the fact that Schneider was a March and spoke elsewhere and the map was not missed. Some weeks later, the precious blueprint was taken, in a biscuit tin, across the Channel by fishing boat and later arrived in London. Ducat went with his wartime spying and eventually was in charge of all part-time agents in the area. After the war, Commandant Ducat of the Dussicòne Bureau was awarded the Medal of Freedom by the Americans (the highest honour a civilian can attain), whilst the French gave him not only the Medal of the Resistance but also the Croix de Guerre. "A model of tenacity and Lorraine paritism" is how the citation for this last award reads. Sadly he died a few years after the end of the war.

This was of course just one of the many feats of bravery performed by civilians in the occupied countries, which materially assisted in the success of 'Overlord'. All over Normandy, for example, there were volunteer agents of an organisation known as Centurie, who, from late 1942, painstakingly collected information on German defences, installations and troop deployments. Their constant stream of information was assembled in Caen, then sent by courier to an inconspicuous backstreet area of Paris, where it was collated and prepared for collection by RAF pilots, using the old fashioned looking but nevertheless highly effective Westland Lysander aircraft, from predesignated fields outside the city at the dead of night. It then was flown over to London, where it was carefully logged onto a master map of the Normandy coastline. Without doubt such information would prove immensely useful to the invading forces. William J. R. Bremner, for example, in his book Hitler's Fortress Cherbourg, makes the point that:

"While the man with the rifle and machine gun bore the brunt of the ordeal, as is always the case in war, many factors were involved in the success of our Cherbourg. The work of the Centurie underground in Normandy provided American commanders with a tremendous advantage — knowing in precise detail German defenses along and behind the Atlantic Wall.”

St Nazaire — ‘Bill Pritchard’s Idea’

"The idea started towards the end of 1941 I think, and was put up to Lord Louis Mountbatten by Bill Pritchard who was really the man who had the idea and Bob Mommsen was later to say he was)./ But Mountbatten was undecided about the whole scheme and invited some American commanders to have another look at it. Bill Pritchard was killed on the raid. They had come out of St Nazaire in 1940 and seen four much we’d left behind there, undamaged. And they felt that we should go back and do something about it.”

That is ex-commander Sir Roland Swanway’s explanation of the origin of the daring raid which took place on the night of 27-28 March 1942 against the French shipyard of St Nazaire, which lies on France’s Atlantic coast some 240km south of Brest. Swanway had been a member of the commandos for some time and had already trained Special Blueshirt raiders in the Channel Islands. At the time of the run-up to Operation ‘Chariot’ — as the St Nazaire raid was code named — he was serving in No. 1 Commando and was selected to take a detachment of 12 men to join No 2 Commando, to be trained as a demolition group.
'We did our training blowing up docks ... and practised blowing up pumping stations and locks in Leith, Rosyth and Edinburgh.'

he told an IWM interviewer in 1988, when he made a sound recording of his wartime memories (Accession No 10231/1). Then they moved to Wales and practised blowing up Pontypool, Newport and Cardiff.

'We learnt how to lower racks of explosive against the lock gates at places where they would do the most damage. And we learnt how to deal with those big metal caissons, empty narrow chambers that slot into the locks to close the locks. And also pumping machinery, the impeller pumps and machinery required to empty a lock and to transfer water in the lock system.'

Clearly the 'powers that be' were after doing a lot more than just blowing up the kit that the BEF had left behind in 1940. In fact St Nazaire was now an important U-boat base, with seven submarine pens, and even more to the point, its port area contained a massive prewar dry dock (the Normandie Dock) capable of holding one of the largest German battleships, the Tirpitz, should it ever decide to come to operate in the Atlantic.

It had been decided that, by using an old US World War I destroyer, now known as HMS Cumberland, loaded with 3 tons of high explosives, a raiding party of commandos would rain, then blow up the lock gates of the Normandie Dock, whilst also dealing with other port facilities. This should put the dock out of commission for a long time. However, it was a daunting task, both for the 237 commandos and for the 345 sailors who would have to get them there.

**German Forces**

As this book is primarily about the Atlantic Wall, it is relevant to go into some detail about the German garrison of this important port and submarine base, which would later be classified as a Festung (Fortress) in January 1944. In 1942 the defences were considerable and all under the command and control of the Kriegsmarine. In overall command was the Kommandant Loire, Kapitän-zur-See Zachschwerd, whose HQ was at La Baule, further up the coast. Under his command was a coastal artillery battalion, a brigade of flak artillery and certain minor forces under the St Nazaire Harbour Commander.

The coastal artillery was 280 MAA (Marine Artillerie Abteilung) under the command of Korvettenkapitän Edo Dieckmann, whose HQ was at Chemoulin Point. The battalion had a total of 28 guns under command varying in calibre from 7.5cm to 15cm, 17cm and a railway-mounted battery of 24cm guns. All those guns would fire during the raid, but the railway guns took so long to traverse that they managed to fire only a few rounds. 22 Marine Flak Brigade was under command of Kapitän-zur-See C.C. Mecke, with its HQ at St Marc. He had

**Above:** Target for Operation 'Charic' was the massive prewar dry dock — known as the Normandie Dock after the liner. The prewar liner was over 1,000ft long, displaced 66,455 tons and made its maiden voyage on 29 May 1925. She was built by Chantiers de l'Atlantique-Perinet at St Nazaire. IWM — A053285

**Below:** HMS Cumberland had its bridge stripped and armoured during a refit prior to the raid. Splinter coating was also put in place. IWM — A053286
'From that point we were on our ears. We navigated up the estuary and then on up the river behind the Camphellson and that all worked absolutely perfectly. . . . we were in the northern channel of the Loire which was well away from the coastal batteries on the northern shore, and nothing happened at all until we were quite close in, when the shooting started. We were in MI four in the column which was very near the end and we saw everything developing in front of us — not that you could see much at all, but you could see the tracer. And it was a wonderful firework display.'

Achtung Landefecht!

On the shore, Captain Færeby-Meer, the local flak brigade commander, who would later be awarded the Knight's Cross, had been puzzled by the way enemy aircraft were behaving. They seemed to be dropping very few bombs, despite the number of aircraft involved and this raised his suspicions that something was wrong. Accordingly, at around midnight he sent a signal to all command posts: 'The conduct of the enemy aircraft is inexplicable and indicates suspicion of parachute landings.' By 01.00hrs, most of the British aircraft had

3d. Assault (Captain Roy, Lieutenant Proctor and 12 OR) — destroy gun positions on roof of pumping house, form bridgehead at bridge to cover withdrawal of parties to the Old Male. Commander Stephen Beatie

Bomber support programme.

Phase 1: 10 Whitleys from 4 Group to attack area of Normanville Dock from 23.30-00.30hrs.

Phase 2: 23 Whitleys from 4 Group to attack same target area from 00.30-01.20hrs.

Phase 3: 23 Wellingtons from 1 Group to attack northern end of Periers Basin and advise 1600ft north of Old Entrance from 01.20-04.00hrs.

The raiders set sail from Falmouth on 26 March, under the overall command of Commander Robert Ryder, RN, on a roundabout route, with a two destroyer escort, down through the Bay of Biscay, quite far to the south of the mouth of the Loire, but then they doubled back again to the north-east until they rendezvoused with a submarine which was the 'beacon' they had to contact, near the river estuary.

As Sir Roland Swayne recalled:

'... I thought there were two locks we had to blow up and a swing bridge. I had eight men and a detachment under John Vanderwerve. Of No. 2 Commando with ten soldiers armed with torches to protect us while we did this. There were three lock gates... There was Bradley, who was to blow up the gates at the top end of the lock. One man in the middle, and then there was the pumping station, I can't remember who was to blow up that... But the whole thing was beautifully planned. Equipment was good, we all had very well thought out loads of explosive to carry and the blowing was very good. We had Tommy Guns and Remington Colls (revolvers)... you could actually kill somebody at 20 or 100 yards range with a Remington — well perhaps not 100 yards but certainly 50, if you knew how to shoot with it.'

As the table below shows, a large number of the commandos on the raid would travel in two groups of Motor Launches (MLs), that would later become HMS Camphellson. The old American flush-decked destroyer had first entered service in the US Navy towards the end of the Great War and was one of 50 such 'gilt horses' to be transferred to the Royal Navy in 1940. She already had 18 months of arduous convoy duties under her belt before being selected for Operation '璋a'.

Camphellson was given a thorough refit before the raid, between 10 and 19 March, being radically altered to look like a German Rover ('Seagull') class torpedo boat. She was also fitted with large metal plates on deck behind which some of the commandos would have to lie, whilst her bridge was stripped and armoured. On the raid she would be commanded by Lieut. Col. Stephen Beatie who

Commando Boatlanding and Targets

There were in fact 17 motor launches as the list shows, whilst below are also shown details of the commandos' targets and who did what.

**Group One** (seven MLs). Under command Captain Hodgson. In charge of Port MI 41.

1a. Demolition (Lieutenant Swayne and eight other ranks (OR) — the two southern lock gates and the swing bridge in the Southern Entrance (Protection: Lieutenant Venderwerve and four OR).

1b. Demolition (Captain Bradley and six OR) — central lock gate in southern entrance.

1c. Demolition (Lieutenant Walton and four OR) — northern lock gate and lifting bridge of southern entrance (Protection: 2nd Lieutenant Watson and 4 OR).

1d. (two MLs) Demolition (Lieutenant Wilson, 2nd Lieutenant Bassett Wilson and 4 OR) — boiler house, impounding station and hydraulic power station in old town. (Protection: Lieutenant Houghton and 4 OR).

1e. Assault (Captain Hodgon, Lieutenant Oughtred and 12 OR) — destroy gun positions on East Jetty and form protective post at landward end.

1f. (Control) Captain Prichard and demolition control party for this group.

**Group Two** (six MLs). Under command Captain Burn. In charge of Port MI, column, to land at the Old Entrance.

2a. Demolition (Lieutenant Woodcock and eight OR) — two lock gates and swing bridge at northern end of submarine basin. (Protection: Lieutenant Jenkins and four OR).

2b. Lieutenant-Colonel Newman's HQ party.

2c. Demolition (Lieutenant Pennington and 4 OR) — destroy swing bridge at northern end of submarine basin. (Protection: Lieutenant Jenkins and four OR).

2d. Assault (Captain Burn, Lieutenant Peirson and 12 OR) — destroy gun positions on towers adjacent to bridge and form protective block. A further emergency task also detailed.

2e. (two MLs) Assault (Captain Hooper and Troop Sergeant-Major Haines and 26 OR) — special task party to destroy two gun positions north of Old Male if occupied, silence any ships in the dry dock and come into HQ reserve.

**Group Three** (four MLs). Under command Major Copland with Captain Montgomery for demolition control in HMS Camphellson.

3a. Demolition (Lieutenant Buttershaw and six OR) — to destroy outer caisson should Camphellson not succeed. (Protection: Lieutenant Chart and 4 OR to destroy adjacent winding hut).

3b. Demolition (Lieutenant Beatt and six OR) — to destroy inner caisson, Lieutenant Pardoe and four OR to destroy its adjacent winding hut. (Protection: Lieutenant Denton).

3c. Assault (Lieutenant Roderick, Lieutenant Struchby and 12 OR) — destroy four gun positions immediately east of inner caisson, destroy any guards in the area of the underground oil tanks and form protective block; drop incendiaries down ventilators of oil tanks if opportunity offered.

Above: Operation '璋a' — the raid on St Nazaire. Source: Combined Operations 1940-1942 (HMSO).
disappeared and those which remained in the area were flying beyond the effective range of his guns. He had already ordered a close-fire to his guns and the switching off of all searchlights, but now, noting the sudden increase in the number and intensity of continued searchlight observation, especially seaward.

Acting on this order, as he says in his own words, 'because he was bored with looking at the night sky, Kovrethenskij Burghen, who commanded 89th Naval Flak Battalion and had his headquarters on the beach watching looking seaward and saw through his binoculars a number of small ships moving at a moderate speed towards the port. When he reported this to his head-quarters, he was told not to be in a hurry and that his job was to look into the sky not the river. However, he immediately reported what he had seen to Mcke. Then at about 01.00hrs, he took up the naval station near St Marc and reported the sighting of some 17 vessels at extreme range. One of Mcke's staff immediately telephoned the Harbourmaster to find out if any German ships were expected and was told "No". This prompted Mcke to send an urgent signal to all concerned: "Achtung Landefelder! (Beware Landing)".

"On receipt of this coded word, the machinery for repelling an invasion in accordance with Emergency Orders was put in force throughout the command. More particularly, all anti-aircraft guns switched to the defence of the shores and all available troops and crews of minesweepers, harbour defence boats and tankers in St Nazaire, many of whom were in their air-raid shelters, from which they were promptly rounded out, were pressed into becoming infantry as Sturztruppen (thrust troops). The most important of these were the spare hands of Mcke's own battalions — the watch off duty, the clerks, instructors, storemen and so on. At the time, a commander of the coastal-defence guns, Kovrethenskij Dzickman, who had become restless at the sound of engines and who had come out immediately at his headquarters at Chouannin on receipt of the sighting report at 1:15, gave the order to his batteries to 'Stand by to attack naval targets.' Why the searchlights had not already been switched on is not explained. According to the signals log, five minutes elapsed before the order was relayed in order to illuminate the target areas without effect. Those five minutes were of priceless value to the dim shapes moving steadily onwards under the misty moon.

Meanwhile the convoy was getting nearer and nearer, and on the bridge of the leading gunboat, Commander Ryder could not believe his luck. Then, at 01.22hrs a large searchlight came on and illuminated the German warships. At 01.30hrs it was extinguished. At once they were challenged by two signal stations, but thanks to a well-rehearsed plan and to the fact that they knew both the call sign of the convoy and the number of guns and the correct signal recognition, they were able to gain a few more precious minutes. The Germans were fooled completely. Not for one moment did they imagine that a British force would take such risks. However, it gradually became obvious to them that a genuine German force they would have no chance of stopping. Every enemy gun that could be brought to bear on the British force began to fire, while the attackers, having run up the White Ensign, replied strongly, having held their fire to the very last moment.

Those commands on board the Camphelfern had been lying down behind their protection shields. One of them recalled that when the destroyer hit the dock gates at about 01.30hrs on the 28th, he was holding on tight and hardly felt the shock. He landed on the road which ran on the top of the lock gates, was caught by a grenade, but saw the pump-house just outside the dry dock blown to pieces and then he scuttled the charges on the Camphelfern and go up. Another demolition party in the second ML landed on the Old Mole to blow up the inner gate of the South Lock, but having landed successfully, they were under heavy fire, so decided to try to approach their objective via a different route but were again unsuccessful. However, they were one of very few several hold-ups and undoubtedly, the early part of the raid, the demolition of the Old Mole was not very well and most of the primary targets had soon been successfully dealt with. They returned to the Old Mole 'a bit perked' at having left intact the lock gates they had hoped to set afire, but set up an HQ around it and together waited to be picked up by the MLs, but there was no sign of them — as most of them had already been sunk. However, this had been anticipated and it had been agreed that should things 'get sticky' then they should try to get out of St Nazaire and fight their way into the open country. Eventually Colonel Newman issued three orders: first, try to get back to England, second not to surrender until they ran out of ammunition and third not to surrender at all if they could help it.

Mcke's flak guns and Dzickman's coastal-defence guns were now freely engaging the MLs. The enemy fire on Roland Swyn's ML, for example, increased as it came abreast the Old Mole, the enemy infantry located there finding it very easy to engage the MLs at point-blank range and soon there were burning vessels everywhere. After making no progress against this storm of fire, the skipper of Swyn's ML reluctantly decided that it was too hazardous to continue and eventually clear the ship around. Naturally this did not please the commandos and there was a lot of grumbling, as they felt they should have carried on. But their losses were no way through the curtain of enemy fire and their ML had to break off the engagement and head back down river. However, on route for home they had the misfortune to meet up with some German naval vessels and, after a savage fire fight, they were all killed by captured, shot to shreds being brought back to St Nazaire. Despite this setback the rest of the raid had gone well. Raid over, only very few of the raiding party had managed to escape alive and now landed were killed or captured, while all but two of the MLs were sunk, so the naval losses were equally high. The Germans were naturally amazed that such a place should have appeared with such little motive. However, the piece de resistance was yet to come.

'At 11.35 on 28 March 1942 at St Nazaire, France, the air was suddenly shattered by a thunderous explosion in the vicinity of the old dock gates causing the famous Normandie lock. The forward half of the ship and a large number of unfortunate German soldiers inspecting her, were swept away. The German High Command, which had recently occupied the old destroyer was washed into the lock by the resulting tumults of water, effectively eliminating St Nazaire as a repair facility for Tirpitz. So ended the career of HMAS Campbeltown, the former USS Buchanan (DD.131).

Those ashore heard the terrific explosion and said to each other: 'There goes the Campbeltown'. The number of German soldiers and sailors blown up with the vessel was estimated at about 400, including some 40 senior officers. Two days later, at about 16.30hrs on the 30th, there were yet more explosions, as delayed-action torpedoes also detonated — pandemonium again broke loose, with everyone trying to get out of the port area. There was such a crowd at the exit bridge that the German sentries opened fire and killed some 280 French workers and even some of their own QT workers, whose khaki uniforms were mistaken for British battle-dress. The Germans had to close the port for some days and evacuate the entire population of the old town, so the raid had many repercussions. Churchill commented that the Germans the prisoners they took 'with respect', but had inflicted severe reprisals on the brave French population who had 'on the spur of the moment rushed from every quarter to the aid of what they hoped was the vanguard of liberation'.

German Reaction

Throughout France news of the raid caused an upsurge of French patriotism, whilst it is said to have infuriated Admiral Hitler. The loss of the Normandie Dock was bad enough, but even worse was the knowledge that the commandos had been able to penetrate German defences so easily. He ordered von Rundstedt personally to conduct an immediate inquiry. This took place at St Nazaire on 31 March. Von Rundstedt reported that there was no fault to find with the German conduct of the action and that no blame could be laid at anyone's door for the British landing. However, that did not satisfy the Führer, who demanded that someone's head must roll. This led to General Alfred Jodl, Director of Operations at OKW and Hitler's chief military adviser, visiting von Rundstedt three days later, 'to examine in more detail the failure to repel the enemy'. The outcome was yet another row between the Heer and the Kriegsmarine on who was responsible for what, which did no good for inter-service co-operation on the Atlantic Wall. As C. E. Lucas Phillips said in his book The Greatest Raid of All:

'This pushing into naval affairs, or the manner in which it was done, hit the first of wrath in Grand Admiral Raeder, the Commander-in-Chief. There seemed to be no one at Hitler's headquarters, he complained, in a position to present a correct picture of events and as a result the Army officers of Supreme Command formed a judgement whollyfalse and detrimental to the Navy. In very much sharper terms Rader wrote personally to Field Marshal Keitel: 'I have heard with the greatest displeasure of your signal to C in C. West on the subject of the St Nazaire enquiry and the questionnaire that has been drafted at your express wish'. As far as official records go, he seemed to have received that apology.'
This was a fitting epitaph for an operation which Winston Churchill described as "a Dread of Glory."

Operation 'Jubilee'—A Glorious Disaster

It 'Charlon' was a success for the Allies as far as breaking through the enemy defences was concerned, then 'Jubilee', which followed some five months later on 19 August 1942, had to be classed as a spectacular failure. Far larger than any other previous raid, it involved landing some 5,000 British and Canadian troops at the French Channel port of Dieppe, with the aim of capturing the port and the headlands around it, then holding the area for some hours while the landing force attempted at first hand all the information they could about the state of preparedness of the enemy defences. As the official PR booklet, Combined Operations 1941–42, published by the Ministry of Information during the war, put it:

'To mount a raid on a much larger scale than that which had been carried out on St Nazaire would not only harass the enemy, which is, it cannot be too often repeated, the primary object of raiding; it would also be a means of providing the Allied General Staffs with very important and, indeed, essential information concerning his defences in the West.'

Plans for the raid, which was initially called Operation 'Rutter', began in April and on 13 May the outline plan was approved by the Chiefs of Staff Committee. It called for the raid to be launched on 2 July, but bad weather and German air attacks on the assembled troops forced first a postponement until 8 July, then a cancellation. C-in-C South-East Command (one General Bernard Law Montgomery), who had been supervising the plans, was strongly of the opinion that it should not be remounted. However, after discussions between Winston Churchill, the Chief of the Imperial General Staff and Lord Louis Mountbatten, the Chief of Combined Operations, it was agreed that, whilst the assault on Dieppe, now code-named 'Jubilee', could be remounted within a month, it would be impossible to plan another new large-scale operation that summer, therefore it should go ahead. Undoubtedly, pressure from Stalin for the Allies to open a Second Front played a major role in this decision, which was, of course, a huge security gamble since much of the briefing of those taking part had already begun.

Dieppe was not chosen at random, but rather carefully selected after a close study of a number of French ports. It was considered that the Dieppe defences represented a fair sample of what the Allies would be up against anywhere along the northern coast of France, thus a major raid would test their preparedness. A certain amount of information was naturally already known, for example, air photographs against our own radar, and in fact been on one of two heavy coast defence batteries at Bernval to the east of Dieppe. Clearly this battery and the one to the west at Varengeville-sur-Mer, would both have to be dealt with as part of the overall attack.

Allied Forces

The main assault would be undertaken by a large force of Canadian Army of whom had been waiting for at least two years to see some action and, despite being both ill-prepared and badly equipped for such a raid, they were willing and eager to take part. Despite this, there were six Canadian infantry regiments from 4th and 6th Infantry Brigades of 2nd Infantry Division: the Royal Regiment of Canada, the Essex Scottish Regiment and the Canadian Infantry in High Command, all Ontario regiments which made up 4th Infantry Brigade; and the South Saskatchewan Regiment, the Queen's Own Cameron Highlanders, the Royal Canadian Regiment, the 5th Infantry Brigade, and the 1st Canadian Army, which was the only British heavy tank — the Infantry Tank Mark IV (A22), appropriately named 'Charlon' — and there were six Canadian infantry regiments which made up 6th Infantry Brigade. They would be supported by the 14th Canadian Army Group (6th Division) reinforcement from the French. In addition, the Royal Marine Commandos, the Royal Navy, and the Royal Air Force, undertook a limited raid on the coast. The Royal Navy, in the north of Tunisia, being, in 1942, still very mechanically unreliable, having been produced in haste under the threat of invasion in 1941–42. The entire assault would consist of eight landings at or near Dieppe, the two outer ones being at Bernval to the east of the port and the other at Varengeville near the mouth of the River Saone to the west. These would be undertaken by No 1 and No 4 Commandos respectively, with the aim of destroying the coastal batteries. In addition to the Canadian and British forces already described, there were some Free French commandos and some American Rangers. The entire force would travel in over 200 vessels, with two minewatering flotillas in the van, eight escort destroyers (including one Polish), a gunboat and a slop to guard the ships carrying troops. HQ ship was the destroyers HMS Calpe, with a second destroyer HMS Ferras as the reserve HQ ship. Those landing were under the overall command of Major-General John Roberts, MC, DSO, 1st Canadian Infantry Division, with brigade commanders being Brigadier Sherwood Low, MC, 4th Infantry Brigade and Brigadier William Sinclair (6th Infantry Brigade). Roberts had his HQ on board HMS Calpe. Germany forces

Despite the fact that the area between Dieppe and Le Havre on the mouth of the Seine was possibly one of the most threatened areas of the Atlantic Wall, the troops manning the defences were, like most of the coastal defence divisions, fairly low category troops. The troops belonged to the Fifteenth Army (Generaloberst Curt Haase, who would be replaced on 30 November 1942), whose three Corps — LXVII, LXXXII and LXXXIV — covered both the coast from the Scheldt to Caen. The first named of these, commanded by General der Panzertruppen Alfred Korte (HQ Rosary) was directly responsible for the Dieppe area with the 302nd Static Infantry Division actually being located in and around Dieppe. Formed in the mid-1940s, the 302nd Static Infantry Division was to be universally known as the 'Dieppe Division' after its stout defence of the town. Its commander was Generalmajor Gerhard Haase (who was not related to the Army commander). The 302nd Infantry Division had some 80km of coastline to guard and it would be hard pressed to do so effectively, as its infantry regiments (570th, 571st and 572nd Grenadier Regiments) were each minus at least a complete company. These divisions were poorly made up in July 1942, when each regiment was assigned a 14th Company, but the reinforcements were, in the main, half-trained recruits and did not even compare with those whose empty spaces they filled who had inevitably gone to the ever-demanding Russian Front. In his book Dieppe 1942 — the Jubilee Disaster Ronald Atkin explains that a large number of these replacements, who arrived just before the raid, were Volksdeutsch (ethnic Germans, living outside the normal borders of Germany) or out-and-out foreigners. As evidence he cites the fact that of the four prisoners brought back to England from the main beaches at Dieppe, only one was a true German, the other three coming from Poland. Two of these had been given the alternative of a concentration camp or joining the Wehrmacht and had only arrived with 200 others in Dieppe on 10 August after a six-day journey from Germany, having been soldiers for just three weeks.

Whatever the reason of the men, clearly it was difficult to keep the garrison focused and instantly ready for any emergency, hour after hour, day after day, month after month. The army commanders issuing orders calling for the highest degree of warlike readiness when the tides and moon were favourable for a landing. One of these periods was 10–19 August. The order he issued was to prove amazingly opposite. It read:

'The troops must realise that it will be a very sticky business if naval and naval guns, sea weapons and Commandos, assault boats and parachutists, airforce troops, or artillery civilians, soldiers and soldiers must all be on top of the seine. They must control every point of all the ships. They must be able to cope with the waves they are using, to attack them and defend themselves as never before.'

"US or THEM! That must be the slogan of all."

"Their Army has in the past received all kinds of tasks from the Führer and has always carried them out. The Army will carry out this task too. My soldiers won't be the worst. I have looked into your papers. You are German men. You will willingly and bravely do your duty. And thus remain victorious."

"Long live our people, our Fatherland and our Führer!"
In line with the other static infantry divisions manning the Atlantic Wall, much of the division’s weaponry comprised captured small arms, for which some types of ammunition were in short supply. However, the artillery was relatively strong, with three heavy and four lighter batteries located in a semi-circle around Dieppe.

"The town's seacoast was guarded by a complicated array of pillboxes and machine gun nests and gun sites, but these defences were positioned mainly to draw the attention of landing parties. The main firepower was concentrated on the heights above the town. An old French tank had been cemented into the sea wall near the west jetty in a static defensive position. "This was the only tank we had in Dieppe," Linder recalled."

Although there were only some 1,500 men garrisoning Dieppe under the command of Oberleutnant Hermann Bartel of 57th Regiment, there were plenty of reserves some distance away. These totalled about 6,000 men, while 10th Pariser Division was resting and refitting about 90km away after being withdrawn from Russia. Once again, there was intense rivalry between the three services, which, as in St Nazaire, would bring problems, especially as regards the vulnerable siting of the heavy coastal battery at Varengeville outside the defence perimeter.

Organisation Tod

In the autumn of the previous year, the OT had sent working parties to build the mass of concrete constructions that were to begin to spring up along the Atlantic coast, with the two headlands being turned into strongpoints. The beach was not yet mined, nor were there many beach obstacles. However, the exits up re-entrants and gullies were blocked with barbwire and barbed wire entanglements.

The Assault Force Departs

Led by three minelayers, which would clear a path through a suspected enemy minefield, the force formed up into its agreed order of sailing, with the two Commandos on the outer flanks. Time passed and first light drew ever closer without any enemy reaction, but then about seven miles from the French coast, at about 03:50hrs, some of the landing craft ran into a small enemy force of armed trawlers, and surprise was lost. This interception was entirely fortuitous for the Germans, the small group of German vessels (five commanded coastal motor vessels, an armed minelayer and two submarine chasers) being on its way from Boulogne to Dieppe. The German ships opened fire, especially at the gusboats that was leading that particular group of landing craft. It was badly damaged and there were many casualties on board, but they continued to attack the enemy, sinking one of the trawlers and severely damaging others. However, the landing craft, which were carrying No 3 Commando — whose objective was to capture the battery at Berneval — were now scattered and clearly all hope of surprise was lost.

Nevertheless, those who managed to land at Yellow Beach, including a party of some 40 US Rangers, fought with great courage. Part of the commando force worked its way around the battery and caused so many casualties that the German gunners turned one of the guns around and engaged them at point-blank range. Fortunately the gun would not depress sufficiently, so the shells went harmlessly over their heads to burst ‘somewhere in France’. For nearly two hours the commandos continued to harass the gun battery, so that it was unable to bring its heavy guns to bear upon the Canadians during the most crucial period of the operation. Then ammunition began to run low and it became very clear that they would never be able to capture the battery, so those who were still able, returned to the beach, waded out to their landing craft and re-embarked.

Ten miles to the south-west, on Orange Beach, No 4 Commando was engaged in a similar battle. Led by Lieutenant-Colonel Lord Lovat, the 250-strong force was scheduled to land at two points, one close to the village of Vasterival, the other 1.5km away some 600m from the mouth of the River Saane. The first party was under the command of Major Derek Mills- Roberts and in a graphic account of the action that took place from the moment they reached the enemy shore, he recalled:

'We were in a mile when the lighthouse (the main landmark) suddenly dived and flak lit up the sky. The tracer rose from all angles along the high cliffs as a squadron of Bresten Buffalos roared inshore at low level. Surprise might have been lost and basic was now essential; we moved in at top speed . . . we landed on a narrow beach. It seemed like sealing round to the back door where a noisy party is in progress.'

They landed swiftly and found the gullies up which they hoped to get up the cliffs. Both were choked with thick wire, but fortunately they were able to blow a hole through the thick wire using Bangalore torpedoes and managed to reach the cliffs which made up the seaside village without being spotted.

However, it would be nearly an hour before Lord Lovat and his party were in position for the final assault. The battery that they had come to knock out had begun firing, so it was vital that they move in. At about 05.30hrs, they opened up with small arms and their little 2in mortars. The third bomb from the mortar fell right in the middle of a pile of shells and charges which were stacked alongside the guns ready for use. There was a blinding explosion and the battery was completely wrecked and did not fire again despite the desperate efforts of the gun crews to put out the fire, under intense sniper fire from the commandos. At 06.20hrs Lord Lovat put in his assault and captured the guns — all six being subsequently blown up. The commandos then withdrew to the beach, carrying their wounded. The official report after the raid read:

'At daylight No 4 Commando, consisting of 252 all ranks, including Allied personnel, assaulted the six-gun battery covering the West approaches to the port of Dieppe. The position was defended by an approximately equal number of Germans with all the advantages of concrete, wire and minefields; concealed machine gun posts, mortars, dual purpose (flak) guns mounted in a high tower and full knowledge of the ground. They had had two years to perfect these defences and when the time came they fought with the greatest determination. Yet within 100 minutes of the landings, the position was overrun, the battery and all its works were totally destroyed and at least 150 Germans left dead or wounded in the path of the raiders and the scene of the fighting. Prisoners were also taken. British casualties numbered 45 all ranks, of whom 12 were back on duty within two months. Operation 'Cauldron' is a classic example of the use of well-trained infantry, bold leadership and the thoroughness of the plan of attack and its swift execution.'
The Canadians Attack

So there had been both success and failure on the flanks of the assault and it would be the same with the main assault by the Canadians. On the inner left flank at Puits (Blue Beach) was the Royal Regiment of Canada, while on the inner right (on Green Beach) the South Saskatchewan Regiment to be followed by the Cameron Highlanders of Canada. In the centre (on Red and White beaches) was the rest of the assaulting force, including the tanks of the Calgary Regiment.

The leading wave of the Royal Regiment of Canada reached their beach at first light and began taking heavy casualties from the moment they landed. As the Canadian artillery FOO (Forward Observation Officer) who was with the battalion to direct fire from the destroyer HMS Garth put it:

'Owing to the heavy and sustained fire of the enemy, the Royal Regiment of Canada was changed in five minutes from an assault battalion on the offensive to something less than two companies on the defensive, pinned down by fire from positions they could not discover.'

The battalion was now also under heavy mortar fire and unable to make contact with the Essex Scottish on its right. Despite covering fire from the two naval support craft which were with the assault group (which continued until all their guns were silenced), shelling from the destroyer Garth and an attack by cannon-firing Hawker Hurricanes, it was soon obvious that the landing had failed and several unsuccessful attempts were made to withdraw.

On the other side of Dieppe, the South Saskatchewan battalion had landed at Pourville, encountering very little opposition whilst getting ashore. However, resistance soon stiffened. Nevertheless the battalion made steady progress, fighting with great tenacity, capturing some of its objectives but not Les Quatre Vents farm which remained very active.

It was followed some 40 minutes later by the Queen's Own Cameron Highlanders of Canada:

'It was broad daylight and as they swept in a piper began to play "The Hundred Pipers" and continued to do so during the landing.'

This battalion's objective was the airfield at St Aubin, about 3km from Pourville and it pressed on up the valley of the River Scie. Whilst the men engaged in forcing a crossing over the river it became clear that something had gone wrong with the centre assault force, as the tanks they should have met there did not appear. Nevertheless, they continued to press forward vigorously, inflicting heavy casualties on the enemy but suffering considerable losses themselves.

Eventually the battalion was forced to withdraw and soon discovered that the enemy had recaptured the all-important high ground west of Pourville, so was able to dominate the beach from which it and the South Saskatchewan would have to withdraw. The landing craft came in at about 10.45hrs, despite heavy mortar fire which hit and capsized at least one. To reach them the Canadians had to cross 200m of open ground, then swim through 150m of water, as the state of the tide made
impossible for the landing craft to come any closer without being beached. By noon most of the troops had been re-embarked apart from a small rearguard under Lieutenant-Colonel Cecil Merritt (CO of the Saskatchewan), who would later be awarded the Victoria Cross for this action.

In the centre, the assault on Dieppe itself was to be delivered by the Essex Scottish Regiment and the Royal Hamilton Light Infantry. They would land on the seawall, where the beach stretched for 1.5 km, from the western breakwater to the cliffs at the Vieux Château and the Casino. Then there was a seawall, a road (Boulevard Maréchal Foch) and ornamental gardens, another road and then houses, which the Germans had fortified. Once the two regiments had secured the beach, then the tanks would land and then push on to hold the town whilst numerous demolitions were laid and blown. If the landing was a success, then the tanks and infantry would exploit to capture a supposed German Army HQ at Arques-la-Bataille (this intelligence proved to be incorrect, the HQ having moved well before the raid took place). The landing was to be covered by a short but intense naval bombardment from the destroyers, followed by some 60 Sperrtraps and Hurricanes strafing the houses, and three squadrons of Rostons and Blenheim bombers dropping smoke bombs on the headland above the harbour. Close in covering fire was again provided by special naval craft, all of which suffered direct hits, one being sunk. The two infantry regiments leapt out of their landing craft and stormed forward. However, just as at Puits, they came under heavy fire from all directions — both frontal and enfilade. Some of the enemy guns in the houses had been silenced by the covering barrage, but not all of them, whilst to the east, once the aerial smoke had begun to clear, the mass of artillery in the caves which were all over the face of the headland began to fire with great effect. The Essex Scottish, being the nearer, took most of the casualties from this fire and could not penetrate any further than the seawall which divided the promenade from the beach. However, they managed to get a small demolition party through the wire which fastened the seawall, who blew up various pillboxes with Bangalore Torpedoes, and destroyed the Casino and various other defences including a 4-in gun.

Meanwhile the tanks had begun to arrive in 10 tank landing craft (LCT), accompanied by sappers who were to demolish any anti-tank obstacles on the beach. They were landed in three waves as follows:

**Wave 1**
- **LCT1** — Landed all its three tanks, one of which reached the promenade 80m beyond the sea wall.
- **LCT2** — Landed three tanks at the east end of the beach all of which got up to the promenade.
- **LCT3** — Lost one tank on the beach but landed the other two which remained on the beach. The one lost at sea was the one equipped with flame-throwing equipment.

**Wave 2**
- **LCT4, 5 and 6** — All landed three tanks each, four of which reached the promenade.

**Wave 3**
- **LCT7** — Landed its three tanks, all reaching the promenade.
- **LCT8** — Carried RHQ. First tank off helved in shape, blocking exit. LCT backed off and looked for another landing site. Here CO's tank was lost in deep water coming ashore. Third tank did not land.
- **LCT9 and 10** — Both landed their tanks, four of which reached the promenade.

They were heavily engaged and all craft received countless direct hits, but nevertheless all but two of the 30-strong tank force were successfully landed. The CO's tank was dropped into 2m of water when the ramp chains were cut by enemy fire, just as it was going through the exit door. The CO (Lieutenant-Colonel Andrews) and his crew baled out safely, but he was killed on the beach. Several tanks remained on the beach, their tracks being damaged by enemy fire, but a large number managed to get over the seawall and did considerable damage to the enemy until they had expended all their ammunition.

By about 06.30 it was clear that the situation was not going as well as had been hoped. There was no word from the Royal Regiment at Puits or from No 5 Commando at Berneval, though both No 4 Commando's action at Varengeville and the two-battalion landing at Pourville had gone reasonably well. The Force Commander then decided it was time to use his reserve, the Fusiliers Mont Royal, giving them the task of reinforcing the Essex Scottish so they could capture the vital eastern headland. Accordingly, they set off in their landing craft at about 07.00hrs, lost two craft going in to the beach and then came under heavy fire on landing. Some were able to shelter behind stranded tanks, whilst their CO was wounded and half of his men were swept along by a strong tide well to the west end of the beach, near the Casino, where they were cut off on a small stretch of shingle and, after taking over 100 casualties, were forced to surrender. Other small parties penetrated deep into the town, but were stopped by superior enemy forces. One of these groups was taken prisoner and forced to undress down to their underwear, then left in charge of a single German guard. They managed to overpower him and made off in their pants and vests! Few of them managed to escape, however.
The town was shelled in smoke and the vital headlands had still not been taken, though there were successes in other areas. Roberts decided to use the Royal Marine Commandos (CO Lieutenant-Colonel 'Tiger' Phillips) to reinforce the Royal Hamilton Light Infantry, to capture the western headland. However, once again the enemy fire was murderous and few of those who reached shore were unwounded, so once again the assault was thwarted.

It was by now becoming clear that Dieppe could not be captured and the force would have to be withdrawn if that were possible. The main withdrawal from the central beaches began about 11.00. As was usual when a curtain of smoke was laid between the two headlands by aircraft, it was carried out under continual enemy fire, with some troops managing to get on board vessels that were not sinking, while others were not lucky, this being a random extract from an account by one of the lucky ones:

"I made my way out to an LCA [Landing Craft Assault]; but the first one I came to was hit and I was knocked off it. I was picked up by another which was over-crowded and sinking, but another craft came alongside and took off most of the men, leaving the rest of us to bale out until we attracted the attention of a further ship which stopped and took us on board."

Soon further rescue and evacuation was impossible. Just after 13.00 the Calpe closed to within 2km of the shore, when it came under machine gun fire from German posts on the Dieppe breakwater. No signs of troops or landing craft could be seen apart from dories. Roberts received a message from Brigadier Southam's HQ ashore to say that he was having to surrender. The expedition then returned to England, some of the ships not getting home until past midnight.

The Results

The butcher's bill was considerable. Of the 5,000 Canadian troops engaged, 3,367 were killed in action, wounded or missing. This figure included 986 killed or died of wounds. Thus, although Moorsbank was able to tell the War Cabinet that two-thirds of the force had returned safely, his statement hid the truth. As Ronald Atkin says:

"In nine hours at Dieppe, the Canadian Army lost more men than in the 20 months of the Italian campaign. The 2nd Division was practically wiped out and its battle worthiness reduced drastically for many months. Not since the Somme in 1916 had a Canadian formation suffered such losses."

On top of these figures, the Commandos lost 270 and the Navy 550, whilst the loss of weapons and equipment was considerable, in particular almost all the new Churchill heavy tanks (27 were landed and stayed on shore, two were lost at sea and just one remained on board an LCT). Another important loss was that of Brigadier Southam's copy of the orders for Operation 'Jubilee', which contained the instructions about taking up prisoners to prevent them from destroying important documents. This was to lead to the tit-for-tat binding of both British and German POWs. Granted, it was stored very safely by the British, but the unfortunate Allied POWs had to put up with being shackled for some time. On the German side of course there was jubilation. 'The enemy has been battered to destruction. He has suffered heavy, gruesome losses,' wrote von Rundstedt in his report on the action. Hitler was delighted and not only asked for his thanks and appreciation to be passed on to all ranks but also granted additional 'Sturmbannführer' ranks for the wounded. Total German casualties were just over 600, which included a handful of prisoners taken and very little equipment lost. It had been a complete reversal of fortune for the St Nazaire raid and must have given the Germans the belief that perhaps their Atlantic Wall was not so bad after all.

Commando VC winner Captain (later Colonel) Patrick Porouch was in no doubt about Dieppe saying:

"It was the biggest disaster that ever happened and the people that planned it should be shot. It was impossible for it to have succeeded — the Intelligence wasn't good enough. The plan depended entirely on total surprise, the slightest variation on that and the whole thing collapsed. It was only mounted to raise morale in Russia, and in England too you'd be forced back in the Western Desert, and to give the Canadians something to do — they'd be hanging around so long getting bored."

From the point of view of the planners for the Second Front, the raid was to prove a source of valuable information. Churchill said that the raid had justified the heavy casualties and 'shed revealing light on many shortcomings'. Probably the most significant remark was made by von Rundstedt, when he said at the end of his comments on the landing: 'He will not do it like this a second time!'

Special Inspector Rommel

It was now time for one of Germany's most famous soldiers to play his part in the saga of the Atlantic Wall. Feldmarschall Erwin Johannes Eugen Rommel had made his name in North Africa as the 'Desert Fox', a legendary panzer leader and military hero, by his brilliant leadership, his outstanding tactical ability and his realisation that showmanship was equally important to becoming a successful commander. He was someone who was admired — even almost revered — by the enemy as well as by his own troops. Despite sickness and eventual defeat in North Africa he was still one of the brightest stars of the Wehrmacht. On leaving North Africa, he had been earmarked by Hitler for a new high post, this time in Italy. However, this post as C-in-C Army Group B, was kept secret from everyone — even from Luftwaffe Feldmarschall Albert Kesselring who was then C-in-C Southern Italy. Differences of opinion on how to fight in Italy should be fought were bound to occur between them and ultimately the Führer decided to give Kesselring complete charge in Italy and to find Rommel and his burgeoning new HQ another task. This must have come as a bitter disappointment to Rommel, who nevertheless wrote philosophically to his wife: 'I'll take it as it comes.' OKW was actually all in favour of disbarding Army Group B, but as von Rundstedt's chief of staff, Günther Blumentritt, explained, Hitler had other ideas:

'Against this Hitler ordered its revival. He knew that in regard to something vital would occur in the west or on some other front and that on account wished to hold this valuable staffs in reserve. But in order to keep Rommel and his staff employed until a responsible position could be found for him somewhere, Hitler decided to entrust him with the inspection of western defences."

He gave Rommel certain instructions based on his Führer Directive 51 (see Chapter 2), the exact details of which Rommel was never able to discover, although OKW did later confirm to OB West (von Rundstedt) their outline content. Basically Hitler's aim in appointing Rommel were threefold:
So that Rommel could familiarise himself with that sector of the Western Front which would undoubtedly prove to be the decisive one, namely the Channel coast area.

To have Rommel take all necessary steps to rectify any shortcomings in the Atlantic Wall defences, making full use of the OT and other resources.

To avail himself of Rommel's experience in fighting the Allies, in particular the British.

Rommel had authority to report directly to Hitler, which inevitably led to friction, not so much between the two field marshals as between Rommel and his headquarters in West and Army Group B — but rather in departmental circles and in their relations with the Luftwaffe's Third Air Fleet and the Kriegsmarine's Naval Fleet West, both of whom had their own distinct lines of communication up to OKW.

So Rommel took off via Flaburga airfield on 21 November 1943 bound for the close besieged country of Normandy through which his 'road to fame' had passed in the heady days of 1940, when he was proving his abilities as a panzer divisional commander and where he would shortly end his military career. Now he was Die Inspekteur der Küstenverteidigung (Inspector of Coastal Defence) and would prove to everyone that he had an imbued sixth sense when it came to spotting the unportable, a talent for inventing contrivances second to none and, above all, the ability to impress almost anyone with his enthusiasm and sheer common sense.

The Inspection Team Assembles

Rommel had begun assembling his inspection team whilst he was still in Italy. Acting on the advice of his chief of staff, Generalmajor Alfred Gaube — one of his trusted Airmen — he requested the assignment of Viceadmiral Friedrich Oskar Ruge as the team's Naval Liaison Officer (Marinenverbindungsoffizier). Postwar Ruge became Inspector of the Kriegsmarine from 1956 until he retired in 1961. He was a jovial Swabian and, as Rommel also hailed from Swabia, there was an immediate rapport and he soon became a firm and trusted friend to whom Rommel could talk frankly. He had entered the Navy in 1914, served in the Baltic and led destroyer raids on Britain. In 1920 he had begun specialising in mine warfare and also established a reputation as a military writer. Ruge arrived on 30 November.

'I reported in this irregular attire,' he wrote later, referring to his bare arms and unbuttoned muffer, 'but it seemed unimportant, since Rommel was apparently less interested in the uniform than in the man inside.' Rommel appeared smaller than he had imagined him, rather serious, full of energy and very natural.

Soon after his arrival, Rommel sent Ruge off to see the Kriegsmarine staff and to collect as much background material as he could that would help them with their task — such items as side tables, maps and charts, shipping details and other information. He would return to join the team whilst they were on route — actually rejoining Rommel in northern Jutland on 2 December. It was indeed fortunate that Ruge had a thorough knowledge of the coast, because much of the material that he so painstakingly collected was destroyed in an air raid while he was still in Berlin.

A special train had been arranged for the team, with spacious compartments and a 'parlour car' which Ruge reckoned had been designed for a Balkan potentate. There was also a large briefing room and a dining car. The team boarded the train on 1 December at Munich railway station, bound for Copenhagen where the inspection tour would begin with a visit to General Hermann von Hanneken, who was commanding all the German forces in Denmark (he was C-in-C there from 27 September 1942 to 27 January 1945). Rommel met him on the evening of 3 December and began his tour the next morning at Esbjerg on the west coast of Jutland. They spent 10 days in Denmark, in which short time Rommel realised that the much vaunted Atlantic Wall was a hollow sham and that a vast amount of work would be needed if a determined enemy assault was to be defeated. He was soon to discover that this applied to most of the rest of these supposedly impregnable defences. Rommel also realised that they were planning to fight the main battles too far back from the coast. He had already decided upon his main strategy, namely that the Allies must be defeated on the beaches before they could gain a proper foothold, and he would propound this message over and over again. In his logical way he reasoned that mobile warfare — of which he was a master — would be impossible against an enemy with total air superiority and a vast preponderance of mechanised weapons — tanks, guns, vehicles — at their disposal.

'I consider that an attempt must be made, using every possible expedient, to beat off the enemy landing on the coast and to fight the battle in the more or less strongly fortified coastal strip.'

He told his chief engineer officer, General Wilhelm Meise, much the same:

'When the invasion begins our own supply lines won't be able to bring forward any aircraft, gasoline, rockets, tanks, guns or shells because of enemy air attacks. That alone will route out any sweeping land battles. Our only possible chance will be at the beaches — that's where the enemy is always weakest.'

He would hold this view throughout the period of command of Army Group B, despite the attempts of others who wanted to fight the battle differently. It was fortunate indeed for the Allies that Rommel's logical approach was not followed to the letter.

After delivering Denmark's report (in Ruge's words): 'how overtaxed the Wehrmacht was — a handful of modestly trained and equipped static divisions had to defend hundreds of kilometers of excellent landing beach,' most of the team moved to Rommel's new headquarters at Fontainebleau, while the Desert Fox flew to southern Germany for a few days' leave, then rejoined them on 18 December. The new HQ was a small, luxurious château which had once belonged to Madame de Pompadour.

The following day he visited von Rundstedt in Paris, where he had just sold his car — he was to regret it later. "It's very charming and I think everyone will go well."

There was undoubtedly a certain amount of mutual respect between them — von Rundstedt was, at 68, Germany's most senior soldier, with Rommel, a mere 52, its youngest field marshal. Although he perhaps saw the younger man as a threat, von Rundstedt was quite happy to let Rommel into the confidence of all the work. Rommel's new chief of staff, who took over from Gause, the brilliant General Hans Speidel, put it succinctly:

'Rundstedt's character, personality and mobility were fading and, at a time when supreme efforts were demanded, Rundstedt remained unknown to the soldier at the front, while Rommel ceilitely exerised his remarkable powers of leadership on the soldiers personally: sparing himself not at all.'

Whilst his main headquarters staff began to settle into Maison Pompadour at Fontainebleau, Rommel and his inspection team continued their tour. The week before Christmas they were in the most important area, namely the Channel coast, and Rommel was again extremely disturbed by all he saw — the lack of proper defences, the relatively poor quality of many of the troops who would have the task of meeting the coming invasion, and the lack of a coherent command structure. He did not break for Christmas, but continued his tours and reports. "Out on the move a lot," he wrote to his son Bruno, "and raising plenty of dust wherever I go." To his wife Lucie he wrote: "I'm going to throw myself into this new job with everything I've got and I'm going to see it turn out a success." So he went
everywhere and saw everything – including Luftwaffe and Kriegsmarine units and their headquarters as well as those of the Heer, also the secret V-weapon sites (he visited one on Christmas Day); nowhere was excluded. His staff were appalled at the pressure under which he worked — and of course he made them work just as hard.

'I want mines!' One of his favourite topics was the laying of mines and the planning of defensive minefields, of which he had gained much expertise in North Africa, for example in his preparations for the Battle of El Alamein. Now he wanted to lay many, many more.

'I want anti-personnel mines, anti-tank mines, anti-paratroop mines' he told Meise,

'I want mines to sink ships and mines to sink landing craft. I want some minefields designed so that our infantry can cross them but not enemy tanks. I want mines that detonate when a wire is tripped; mines that explode when a wire is cut; mines that can be remotely controlled and mines that will explode when a beam of light is interrupted. Some of them must be encased in a monotonous metal, so that the enemy’s mine detectors won’t register them.'

And as he talked he drew diagrams to illustrate his thoughts. His ideal defence line would be an impregnable mixture of minefields and bunkers up to 10km wide — like his Alamein line but at least 50 times longer. “Quite apart from Rommel’s greatness as a soldier,” wrote Meise later, “in my view he was the greatest engineer of World War 2. There was nothing I could teach him. He was my master.”

Everywhere he went he imparted the ‘Rommel Magic’ and the ordinary soldiers, who probably had never seen a field marshal before in their lives, were impressed by the interest he took in their individual jobs. Anyone he discovered to be ‘living the soft life’ swiftly found themselves on the receiving end of his wrath — irrespective of rank. One example was Generaloberst Hans von Salmut, commander of the Fifteenth Army, who protested when Rommel told him that he wanted his troops to lay more mines than ever before. Salmut told him he wanted ‘fresh, well-trained soldiers not physical wrecks’, then patronisingly went on: ‘stick around a bit and you’ll soon see that you can’t do everything at once. If anybody tells you different, then he is just trying to flatter you or he’s a pig idiot.’ Once Rommel’s staff were out of earshot the furious Desert Fox gave Salmut a tongue lashing that left him red-faced and speechless. ‘He’s quite a roughneck that one,’ beams Rommel to Ruge as they started their journey back to Fontainebleau, ‘that’s the only language he understands.’ From then on Salmut was ‘pro-Rommel’ and warmed to the Field Marshal’s ideas. In a report from the Fifteenth Army files which is quoted in David Irving’s brilliant book on Rommel (see Bibliography):

‘Field Marshal Rommel’s view is that our defence forces must be concentrated much closer to the coast. Our reserves are to be brought right forward and thrown into an immediate counter-attack. If the British once get a foothold on dry land, they can’t be thrown out again.’

Rommel explained his plan for laying mines all the way along the coast. There were over 608,000 mines waiting to be laid. Rommel told Salmut, whilst even dummy minefields had proved their worth in North Africa. Rommel and Salmut toured the Fifteenth Army sector and visited everywhere,

Below: On one of his early visits to what he considered to be the most important part of the Atlantic Wall, namely the Channel coast. Rommel is seen here (right) at the Batterie Batzowdeau near Tréport at Revierside near Ostend, 21 December 1943. The battery commander Kapitänleutnant H. Hoppe (saluting) is greeting Generalleutnant Freiherr von und zu Werner Glas, who was then commanding LXXX.A Corps. Reverchon

in France until February 1944 — then set about writing his report. In general he had been very disturbed by almost everything he had seen. He had found the Army forces to be ‘barely adequate’ for a vigorous defence, whilst the Navy and Air Force were both too weak to be able to provide tangible help. There was a lack of proper defensive plans, except for the fortresses. Everywhere there was a lack of mobility and of basic defensive weapons such as minefields. ‘I have ordered all the troops to ram stakes into the beaches as a barrier against landing craft,’ he noted in his diary on 15 January 1944, the day on which he was given tactical command of all troops on the coast opposite Great Britain. He also made an educated guess as to where the enemy landings were most likely to take place — namely in the Pas de Calais area, because of the presence there of the Vosseret sites. He later retracted this guess. He also put in his report that the enemy would precede any seaborne landings with severe aerial bombing, sea bombardments and airborne landings, all of which came true. He also said that he did not think the coastal defences were strong enough to withstand the Allied attack and that an immediate and decisive counter-attack would have to be launched and that this was the main reason for keeping mobile troops — panzers and panzergrenadiers — close to the coast. This was to be the main bone of contention with von Rundstedt and his advisors.

Driving like a whirlwind through the French towns and villages in a Herch car, frequently to the shouts of ‘C’est Rommel!’ from the local populace.

During December and January Rommel continued his inspections, covering mile after mile of coast in tireless reconnaissance, turning out coastal battalion after coastal battalion for inspection, march-past and pre-emptory interrogation; quizzing commanders, from generals down to corporals, finding out their views and laying down his own priorities. He was convinced that, in most places where a landing was possible, there should be several parallel minefields, each some kilometres wide, forming a defensive zone up to 8km in depth and requiring many millions of mines. These minefields would be covered from fortified strongpoints, sometimes including stationary tanks, and requiring considerable constructive effort. Dummy positions were to be built in order to deceive the invaders, whilst fictitious staffs, movement tables, orders and so forth, would be co-ordinated into an army group deception programme — not unlike what the Allies were doing on the other side of the Channel. In the sea itself would be four belts of underwater obstacles, one in 2m of water, one at low tide, one at half tide and one at mean high tide. Against airborne attack Rommel ordered the erection of stakes (soon known as ‘Rommel’s asparagus’). Everywhere he went he produced new ideas from his ever-fertile imagination.

Rommel continued his duties as “Special Inspector” for some months — he did not visit the western and southern coastlines
Rommel’s Report

Complied and signed on 22 April, Rommel’s eventual report was both long and detailed, containing many comments and instructions for everyone involved in manning the Atlantic Wall. To save space I will try to paraphrase the most important points he raises. He began with some praise — the career perhaps before the stock — when he said that:

‘Almost without exception unusual progress has been made in all defence groups sectors in accordance with the seriousness of the situation. I expressed my satisfaction to the commanders and troops of all available forces and their close employment of a great part of the civilian population.’

However, he went on to say that: ‘Here and there I have noticed units that do not seem to have recognised the urgency of the situation and who do not even follow instructions.’

Rommel then listed examples, such as his instruction that all mines laid on the beaches had to be live all the time, but that he had found this order has been countermanded in some locations. ‘I do not intend to issue unnecessary orders every day,’ he said,

‘I give orders only when and if necessary. I expect, however, that my orders will be executed at once and to the letter, and that no unit under my command makes changes, or even gives orders to the contrary, or delays execution through unnecessary red tape. On the contrary, I expect that all my orders will be followed immediately and precisely and that the carrying out of orders will be supervised.’

Then he listed various conclusions he had reached, which, in essence, an engineering treatment on obstacles of all types.

Beach Defences

Beach Defences In general these ‘K’ obstacles (‘K’-Klötze [cones]) needed to be ‘dense and effective’ so that they would not only delay the enemy but also destroy him in the water. Rommel mentioned items such as the ‘Nutteracker’ Mine I-III, the concrete shell for the Teller mine (to reduce the shock of other imports such as shell fire setting off the mines in sympathy) and the concrete obstacles known as tetrahedra. The first of these were, according to experiments, very effective against landing craft and amphibious vehicles, including tanks. The concrete shells also protected against the penetration by seagulls and the pressure of the waves which could cause the charge to detonate. Little by little, the density of mines on the beaches had to be brought up to one per metre.

Factories for concrete In every sector the factories making concrete structures needed to liaise with the OT, so as to produce the special mixtures of concrete, which the OT already knew about.

Concrete Foundations for Czech obstacles (Tschachenigel) These improved the obstacles considerably by raising them up and thus preventing them from becoming chopped up with sand — a major threat to beach defences. Where concrete was unavailable Rommel said beachwood masses were to be used and he had already proved very effective.

Tetrahedra Steel tetrahedra (teteratetra) were better than the lighter concrete ones. They were also particularly valuable in locations where it was impossible to drive in stakes — such as on cliffs and in shallow water, operated by pulleys mounted on anchored boats or floats operated with the use of horses. Mines could be fixed to their front that would explode on contact so as to destroy enemy vessels as well as merely stopping them.

Ram logs (Hemmelnläger) These had proved very effective even against large boats, but much have a slope of 30°-40°. Insulating saw-like/chief-like blades to penetrate a few inches would help to cut open the bottom of a ship. Mined logs should be carefully and systematically placed at 20m intervals and at great depth.

Belgian Gates (Rollböcke and Hennikken) — also called ‘Element C’ Like the Czech obstacles, these could be very effective against boats. ‘Some units,’ commented Rommel, ‘even installed mines on Rollböcke which I advise strongly. He also told units to alter the placing of their movable ‘K’ obstacles as often as possible on the beach, but commented that: ‘most units, however, have been stick in this respect’.

Defences Against Airborne Troops

Above: Rommel and his staff at the opening of a tunnel in the Atlantsch Wall. He warned that further raids on the beaches should not be expected.

Above: This well-known, but striking, photograph of Rommel and party standing along a French beach between rows of obstacles encapsulates perfectly the energy and determination with which he did his job as inspector of fortifications. Bundesarchiv

Rommel explained that he had been ordered to take charge of defences against airborne troops. He especially thanked 348th Infantry Division (in the Dieppe area) for the way it had installed — and was continuing to install — ‘strong obstacles against airborne troops in the sector between land and sea in such a quick and thorough manner’. The division had managed to employ civilians (including women who sang at their work) principally because it paid them immediately and in cash. The placing of logs and the wiring of open fields was of the greatest importance, because, as Rommel explained:

‘It is important that there could be no mines in areas where farmers were ploughing or cattle grazing. Areas of major minefields were not to be taken up without Army permission, whilst a broad minefield was to be laid around all fortresses-like installations. Both the Americans and the British disliked entering potential minefields, and Rommel commented that even their experts could not tell a dummy minefield from a real one without properly checking it over. Engineers were not needed for the construction of dummy minefields except for their planning. All officers had to be able to construct dummy minefields.

Camouflage of Defence Positions

He commented that he had seen very well-constructed battle installations in the middle of green fields, yet the camouflage nets were the old-style black ones, which allowed enemy bombers to recognise them from a great height. The old nets must therefore be newly sprayed to fit in with their surroundings — or used on dummy installations.

Use of Smokescreens

The use of artificial smoke during enemy attacks was highly recommended, but using burning leaves or straw for makeshift smoke could, Rommel said, be just as effective, especially because artificial smoke was so scarce. It could also be used to draw the enemy’s attention to dummy installations.

Tearing Down and Mining Beach Houses

There had been too much tearing down of houses. Rommel argued that the enemy would most likely seize at such houses, villages and towns, if they were visible from the sea. Therefore they should only be taken down if it was necessary to create a field of fire, otherwise it was better to leave them as targets for the enemy. Mining such houses had proved unsatisfactory, and it was more effective to use mines on the beach or in minefields. Every bomb dropped or shell fired at these houses was one less to be used against the defenders.

Reinforcements

Commanders had to make use of every single man in the short time left before the enemy came and any member of the civilian population as well. He quoted an example in one company where only 13 men out of 180 were working on the beach and the rest were occupied in the bivouac area in which they had lived for over a year. Nothing had been done to protect their front lines.

Co-operation Between Infantry and Artillery

This was essential and he mentioned a highly professional demonstration that he had watched when ‘all arms had interacted with great speed and professionalism’. Such co-operation was to be encouraged, especially with the coastal naval batteries.

Conclusion

Rommel closed his report by re-emphasising that the German forces needed swiftly to bring all their defences up to such a standard that they would hold up against the strongest attacks. ‘Our defences, together with the sea, represent one of the strongest defence lines in history’, he said.

‘The enemy must be annihilated before he reaches our main battlefield. From week to week the Atlantic Wall
Army Group B Assumes Command

Meanwhile, Rommel’s headquarters, Army Group B, had taken over responsibilities for the Channel and Atlantic coast north of the River Loire on 15 January 1944. This was the area in which Hitler was convinced that the Allies would land, as this extract from a talk he gave to the C-in-Cs of the three branches of the Wehrmacht, plus all the Army and Fortress commanders on 20 March 1944, shows:

'It is obvious that the Anglo-Americans will and must land in the west . . . The most suitable and hence most threatened areas are the two peninsulas in the west, Cherbourg and Brest, which are very tempting and offer the best possibilities for forming a beachhead.'

He went on to emphasize that it would be essential for the enemy to gain a port — once again showing that he knew nothing about the revolutionary Mulberry Harbours.

As the chart below shows, the command structure was fundamentally flawed in that von Rundstedt’s OKW had no direct control over the other two services. It was the same with Geyr von Schweppenburg’s Panzer Group West HQ, which was created in late January 1944 and did not come under Rommel’s Army Group B. Even the LXXXVIII Army Corps, which was responsible for the North Sea coast, the Scheldt estuary and the Dutch/German border area, officially came under the command of all German forces in the Netherlands (Generalfeldmarschall Friedrich Christiansen), although in practice Army Group W went straight to the corps commander General Hans Reinhardt.

Moving to a New Location

Rommel was never happy in the palatial surroundings of Maison Pompadour, considering it was far too far to the rear, so he asked OKW to assign him the ex-Operation ‘Sealion’ headquarters at Soissons, north-east of Paris. This was refused but he had already selected an alternative which was approved, namely, a château built and expanded between the 12th and 17th centuries at La Roche-Guyon, some 80km west of Paris, overlooking the Lower Seine and less than 130km from the coast. Behind the tiny château rose sheer chalk cliffs into which German engineers blasted a series of tunnels and enlarged some existing old workings, until they had room for living and working quarters for Rommel’s 100-plus staff officers and soldiers who manned the HQ. Only senior staff were accommodated in the château, Rommel occupying a modest ground floor apartment adjoining the rose garden. By early March all the necessary preparatory work had been done and HQ Army Group B moved in on the evening of 9 March. The château was owned by the La Rochehusseur family, who were allowed to stay on and with whom everyone on the staff soon formed a pleasant and amicable association. Rommel often shot with the old duke, while his younger staff officers flirted with the attractive young daughter of the family.

Inspections Continue

Rommel spent little time in his new headquarters, being constantly on the road, visiting his troops and stirring them into almost ceaseless activity. Single-minded to a fault, when one of his party remarked on the beauty of the spring flowers in the area they were visiting, Rommel is supposed to have replied: 'Make a note, this area will take at least a thousand mines! On another occasion, when asked if he would like to visit the famous porcelain works at Sevres, he quickly agreed as he wanted to see if they could turn out waterproof casings for his sea mines. Admiral Ruge lists the following as being the major problems that emerged from their constant inspection tours:

1. There was no unified basic concept for the defence. Some commanders in some areas were doing their best to build

defences in their immediate area, but nothing had been co-ordinated.
2. Defences of the few major ports had been taken in hand according to clear plans, but not all were as yet completed. Useful information had been gained from the British raids, such as on Dieppe, where harbour protection batteries had been located outside the defensive zone and were thus easily eliminated by the enemy.
3. No agreement had been reached about the basic principles of siren coastal artillery batteries. This was never resolved in France, so coastal guns lacked the sophisticated fire control systems that were available, for example, in the Channel Islands.
4. Rommel considered that sea mines were one of the best ways of stopping and damaging an attacking enemy, so he advocated strings of mines further out and acoustic or magnetic ground mines in the shallower water (10–30m deep). However, the need for such mines had not been considered before, so Mine Research Command was still in the process of perfecting designs.
5. There was a lack of striking power and flexibility among the troops in Denmark in particular, but elsewhere also, there being more evidence of, as Rommel put it, the ‘horse and bicycle, rather than the aircraft and the tank’.
6. Finally, the hardy annual that would never go away, namely the lack of co-operation between the services at the highest command level, despite the good personal relations on the ground. This led to anomalies such as siren naval batteries and air force radars in front of infantry positions which were actually there to defend them.

As Rommel wrote to Lucie in late January 1944,

'The job is being very frustrating. Time and time again one comes up against bureaucratic and obstinate individuals who resist everything new and progressive ... but we will manage it all the same.'
Chapter 8

Layout and Manning — Before D-Day

Fighting Strengths

Before looking at the make-up of the length of the Atlantic Wall from the North Cape to the Spanish border, we should try to get some idea of the size of the forces involved, so as to gauge what the Allies faced as they began their final preparations for the invasion. In his book The Last Year of the German Army, historian James Lucas gives details of the strengths of the various German army groups as at 1 June 1944. In each case he shows both the total strength of the army group and the strength of the actual fighting troops at the sharp end. Amongst the figures given in the table are the following that are relevant to this study:

<table>
<thead>
<tr>
<th>ARMY GROUP</th>
<th>RATION STRENGTH</th>
<th>BATTLE STRENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>348,888</td>
<td>190,538</td>
</tr>
<tr>
<td>Norway</td>
<td>105,419</td>
<td>42,265</td>
</tr>
<tr>
<td>Denmark</td>
<td>27,590</td>
<td>16,290</td>
</tr>
</tbody>
</table>

How many of these troops were actually manning the Wall is not easy to estimate, though Generalleutnant Hans Speidel in his book We Defended Normandy says that there were approximately 60 static infantry divisions, manning the entire 5,000km of the ‘Atlantic Front’. The strength of an average static division was then probably under 10,000 men rather than the normal ‘war establishment’ figure for an infantry division of 17,000 plus, which works out at 600,000 troops or 120 troops per kilometre. However, applying Lucas’s ‘battlefront’ principle then roughly half of these would be supporting troops, so this figure can be cut in half to 60 fighting men. This is, of course, only an approximation, as the concentration varied enormously, for example between fortresses where there were large garrisons (10,000 in Boulogne, 25,000 in the Channel Islands and 35,000 in Brest) and hazardous landing areas with high cliffs or dangerous tides, which made a potential major landing well nigh impossible and thus made such numbers unrealistic.

In addition to the Arms, both the Navy and the Air Force had major bases and units spread within Occupied Europe, including along the area of the Atlantic Wall. However, it was the naval coastal artillery — Marine Artillerie (MA) — and the Air Force anti-aircraft units — the flak arm — which were most concerned with defence of the Wall.

Naval Artillery

It is true to say that much of the responsibility for providing large static artillery batteries along the Wall rested on the Kriegsmarine. In many cases, it was one of the primary tasks of the senior naval commander in the area to co-ordinate the fire of all the coastal guns while the enemy was at sea, the Army not taking over until the enemy had landed. This led to disagreements as to the tactical principles in string guns and observation posts which were never resolved before the invasion.

The Flak Arm

At the beginning of the war nearly a million men, that is to say almost two-thirds of the total Luftwaffe manpower was serving in the flak arm (flak being an abbreviation for Fliegerabwehr kanone — that is anti-aircraft gun). Its size increased so that by summer 1944 there were some million and a quarter men and women, that is to say nearly half of the Luftwaffe, so employed. Basic flak units were of four types — heavy, light, mixed and searchlight — and they were to be found all along the Wall, sometimes with the dual purpose of being able to engage naval targets as well as aircraft. Of course, with the Army, many sailors and airmen were in a supporting role; for example, Hans Speidel says that there were more than 300,000 Luftwaffe personnel making up the ground staff of the Air Force in the West alone, which worked out to 100 ground staff for every airman. Betterly he ascribes this position to the ‘ambition of Göring to create a special force of his own — a peculiar urge that seizes the grandees of any revolution’.

Vital Areas

There were three potentially vital areas on the Atlantic Wall. Residing from north to south these were:

Norway (3) — Narvik, Bergen and Trondheim.

Denmark (4) — Frederikshavn, Halsnæs, Alborg and Esbjerg.

Germany (10) — Sylt, Helgoland, Brunsbüttel, Cuxhaven, Westerland, Wilhelmshaven, Wangerooge, Norderney, Emden and Borkum.

The Netherlands (4) — Den Helder, IJmuiden, Hoek van Holland and Vlieland.

France (12) — Dunkerque (Dunkirk), Calais, Boulogne, Le Havre, Cherbourg, St Malo, Brest, Lorient and St Nazaire, La Rochelle and both sides of the mouth of the Gironde.

Channel Islands — one location with four guns.

Total = 37 locations with a total of 114 guns.
Norway
In June 1944 the German Army of Occupation in Norway was known as AOK Norwegen (Army Group Norway), even though it was only of single Army strength. Nevertheless, by then there was roughly one German soldier for every 10 Norwegians so the garrison was considerable. The commander from 1940 until December 1944 was Generaloberst Nikolaus von Falkenhorst, with Generalleutnant Rudolf Bamler as his chief of staff (1942-February 1944) who then handed over to Generalmajor Eugen Theilacker. Subordinate formations in June 1944 were XXXIII, LXX and LXXI Corps with 89th Infantry Division (the 'Hornehede Division') in reserve. This division had been created in 1944 from personnel in the reinforced regiments of the Replacement Army and trained in Norway from March-June 1944, returning to central Europe about the time of the Normandy invasion. It was ordered first to the Rouen-Le Havre area, then on to Normandy in late June where it suffered heavy casualties. Its place as army group reserve was taken by the Norway Panzer Brigade.

As already mentioned, the protection of Norway had been given top priority because it was difficult to bring in reinforcements and to defend the large number of potential landing sites/ports and so on. Even so, the occupation forces were able to protect properly only the entrances to the fjords and the islands off the coast. The interiors of the fjords were only thinly defended, in some places just by field works without any troops, whilst strongpoints protected the military bases and main access routes into the interior. The following were designated as defensive areas: Narvik, Lofoten islands, Langøya, Tromsø, Bodø, Mo, Vega, Rorvik, Trondheim, Kristiansund, Ålesund, Solund, Bergen, Stavanger, Flekkefjord, Kristiansand, Arendal, Tønsberg and Oslo. The three most important were Narvik in the north, which was given top priority, then Bergen in the south with its vital air and sea bases, and finally Trondheim, because of its submarine pens.

There were some 225 artillery batteries of all types around the coast, containing a total of approximately 1,000 heavy and medium guns — over 40 of which were 24cm or larger in calibre. Good examples of these super-heavy were one of the batteries defending the approaches to Narvik, the forty 24.0cm naval turret of the Battery Trondenes, and the 28cm triple gun turret at Fort Austrått, Lundahagen, Orland, guarding the far reaches of Trondheim Fjord. This turret was originally the stern gun turret of the German battleship Gneisenau. In addition to the gun batteries there were 15 torpedo batteries of various sizes (one to four tubes) protected by concrete bunkers.

In summary, over 280 large fortifications were built around the Norwegian coast, plus thousands of smaller fortifications and positions. Unlike in Denmark, the fortifications and defensive positions were solidly built on and into rock, so many of them have survived to the present day.

Army Forces
On 12 April 1945 the German Order of Battle showed the following troops in Norway, under command of the Twentieth Mountain Army:

AOGS: A good shot of troops manning beach positions, with anti-tank walls, wooden beach obstacles, wire and probably also a bell of mines. This photograph gives an excellent idea of the height of the wall. J. F. Barmoux Collection and Bundesarchiv

Above: Map of the coastal batteries, Denmark, Source: Europa Nostra Bulletin 51.

KEY
1. Sonderhoy Battery
2. Roland Battery
3. Vester Vedsted Battery
4. Sandeho Battery
5. Frueby Battery
6. Vesteraalands Battery
7. Grønland (Greiauen) and 3rd Flak Battery
8. Dammeby (Eiding) 4th Flak Battery
9. Glesing (Eiding 5th Flak Battery
10. Frederikshavn (Eiding 2nd Flak Battery
11. Vogelnest (Tirpitz)
12. Osby Battery
13. Skarvland Battery
14. Vorgab Battery
15. Børnemose Battery
16. Dybeny Battery
17. Nymindegab Battery
18. Staurning Battery
19. Sønderø (Kroy) Battery
20. Bjørnhaug (Name of Fjord) Battery
21. Skjæraut Battery
22. Torsing Battery
23. Thyrborøn Battery
24. Asger Battery
25. Lyngby Battery
26. Krommelder Battery
27. Harstad 5th Flak Battery
28. Harstad 1st Battery
29. Harstad 2nd Battery and 2nd Flak Battery
30. Harstad 4th Flak Battery
31. Harstad 3rd Flak Battery
32. Vigra Battery
33. Blaaberg Battery
34. Sunniva Battery
35. Færøskjul Battery
36. Lieknæs Battery
37. Hornemøsy Battery
38. Hinsholst East Battery
39. Transtad Battery
40. Skogn Battery
41. Asbak Battery
42. Askim New Battery
43. Frederikshavn North Battery (Flak)
44. Frederikshavn Harbour Battery
45. Frederikshavn South Battery and Flak Battery
46. Satsby Battery
47. Asaas Battery
48. Helg Battery
49. Tøhiro Battery
50. Helvaarskov Battery
51. Udbyhøj Battery
52. Fjærknop Battery
53. Emmendick Battery
54. Grenaa Battery
55. Karholt Battery
56. Helvæng Battery
57. Askogen Battery
58. Skirnir Battery
59. Skodde Battery
60. Akershoved Battery
61. Trelle Nua Battery
62. Roje Battery
63. Midskov Battery
64. Frynshoved Battery
65. Halskov Battery
66. Rønneæs Battery
67. Hetnebro Battery
68. Ørstad Nua Battery
69. Sjællands Oasis and Voreby Battery
70. Ebbeløyke Battery
71. Speidkerby Battery
72. Salgaardshøj Battery
73. Hestebjerg Battery
74. Hornøyby Battery
75. Helgønder Battery
76. Nivå Battery
77. Geitnor Battery
78. Dueodde Battery
Naval Artillery

There were also numerous naval artillery units located in Norway: a total of 14 naval artillery detachments (MAA 501–507 and 510–516); plus 10 naval AA detachments (701, 702, 706, 709, 714, 715, 801, 802 and 822).

Denmark

Soon after moving the country in the spring of 1940, the Germans immediately began to fortify the coastline, so as to maintain communications with their troops in Norway. Befehlshaber der deutschen Truppen in Dänemark (Bd d. drach. Tr.) Dänemark — Head of the Occupation Forces in Denmark was Generalleutnant Hermann von Hanneken from 27 September 1942 until 27 January 1945 when he handed over to Generaloberst Georg Lindemann who surrendered Armee General (the remnants of the German troops in Denmark being withdrawn to the east of the war. Von Hanneken had specific orders to bolster coastal defences against a possible invasion.

The main purpose of the invasion of the Germans was that any invasion would be on the flanks of one or more of the harbours that the Allies would have to capture. Coastal defences were reinforced on the places and thinned out elsewhere along the open coast. It was also necessary to fortify the land-bridges that connected the coastline with the small fishing villages, through the dunes and then over the boggy areas behind them. A major expansion began in 1943, and the Army and Navy began a systematic extension of coastal defences from the German border up to Skagen and round to Frederikshavn. Along this line infantry, anti-aircraft, and other field defences were built in long chains. The key points in the defence were: Frederikshavn, Skagen, Løkken, Hansholm and the western entrance to Lolland and Sjaelland, with Fredericia, which was thickest on the south side. The most important defences were two rows of batteries, two of the largest being the 38cm guns at Öksby and Esbjerg. There were also, as in Norway, some torpedo batteries in concrete casemates.

At the time of D-Day the Danish invasion defences were still incomplete and that summer and autumn the Kriegsmarine warned of the potential danger of an attack on the Skagerak and Kattegat, which could then penetrate into the Baltic. This would isolate Norway, and have a serious effect upon submarine warfare, especially the ships of Sweden. In addition, batteries were built in the east of Jutland and on the island of Slesvig in the Baltic. The basic field works containing few concrete structures. However, it was felt that without them more troops would be needed to defend Denmark (remember the German principle of 'Economy of Force' mentioned in Chapter 5), whilst it would be highly dangerous to open up such an invading route into Germany.

The German works in Denmark exhibit great variety of design and construction varying in size from the small flanking positions that are found along most of Jutland's coast to the large fort-like attack points that were placed around Esbjerg, Hansholm and Frederikshavn. The flanking positions are of three types depending on where three forts were, whilst three of these fortified towns had mentioned consist of about 1,000, 700 and 300 respectively. In all the forts were built more than 20 bunkers in Denmark. The number of fortified groups or areas is also very large. For instance, the combined number of just the coast defence batteries, anti-aircraft batteries comes to more than 150. In addition there are infantry strongpoints of various sizes, flanking positions, various technical installations etc., in all more than 300 fortified areas.

After the war nearly all the bunkers — apart from a few taken over by the Danish military — were stripped of their equipment and covered over. On 12 April 1944, the following troops were in Denmark:

- Naval Area 'Denmark' — 7th Division, 233rd Division.
- Army Reserve — HQ 16th North (Jutland) Division.

Naval Artillery

There were nine naval artillery detachments, four naval AA detachments and two naval artillery arsenals in Denmark.

Germany

The small length of North Sea coastline of Germany, stretching from the Baltic Sea to the Dutch border, was defended very strongly. The main part of the German ports and naval bases, such as Hamburg, Bremerhaven, Wilhelmshaven and Cuxhaven, all of which were heavily garrisoned and protected by heavy guns. These were mainly against any future invasion of the off-shore East Frisian Islands, which were garrisoned and protected with numerous gun batteries. The area of the British Gulf, for example, had some 50 gun batteries, which included at least 12 heavy guns of 24cm calibre or over.

Naval Artillery

The naval artillery presence was considerable, and was divided under two headquarters until late 1944. These were the Naval Command North Sea and Coastal Command German Bight (later known as the Admiral German Bight). Under their command were numerous naval and AA artillery regiments and detachments. These included 20 battery locations on the coast, five gun batteries, two of the largest being the 38cm guns at Öksby and Esbjerg. There were also, as in Norway, some torpedo batteries in concrete casemates. In 1943, the Navy and Army began a systematic extension of coastal defences from the German border up to Skagen and round to Frederikshavn. Along this line infantry, anti-aircraft, and other field defences were built in long chains. The key points in the defence were: Frederikshavn, Skagen, Løkken, Hansholm and the western entrance to Lolland and Sjaelland, with Fredericia, which was thickest on the south side. The most important defences were two rows of batteries, two of the largest being the 38cm guns at Öksby and Esbjerg. There were also, as in Norway, some torpedo batteries in concrete casemates. In 1943, the Navy and Army began a systematic extension of coastal defences from the German border up to Skagen and round to Frederikshavn. Along this line infantry, anti-aircraft, and other field defences were built in long chains. The key points in the defence were: Frederikshavn, Skagen, Løkken, Hansholm and the western entrance to Lolland and Sjaelland, with Fredericia, which was thickest on the south side. The most important defences were two rows of batteries, two of the largest being the 38cm guns at Öksby and Esbjerg. There were also, as in Norway, some torpedo batteries in concrete casemates. In 1943, the Navy and Army began a systematic extension of coastal defences from the German border up to Skagen and round to Frederikshavn. Along this line infantry, anti-aircraft, and other field defences were built in long chains. The key points in the defence were: Frederikshavn, Skagen, Løkken, Hansholm and the western entrance to Lolland and Sjaelland, with Fredericia, which was thickest on the south side. The most important defences were two rows of batteries, two of the largest being the 38cm guns at Öksby and Esbjerg. There were also, as in Norway, some torpedo batteries in concrete casemates.

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Right: Inside one of the infantry bunker complexes, designed to hold a squad/section of 10 men. Note the racks for their rifles, steel helmets and personal equipment, the coal-fired bunks and the coal/wood-burning stoves, also the electric light. Their only "fix-up" appears to be Adolf Hitler! The bunker was at Zeebrugge. Bundesarchiv.

Below: This bunker was clearly for work, not relaxation. It was probably a coastal artillery control post. Its location was Calais and the photo was taken in July 1942. Bundesarchiv.

Top: Loading an ex-Czech 4.7cm Pak 36/39 inside a casemate. The anti-tank gun is mounted on skids with an MG34/42, both having been acquired from the Czech Army. NM — H20364.

Above: Fortunately for the Allies, this was the sort of tank in the front line, that is to say, "on the beaches", namely a static French Somua S-35, located close to the French/Belgian border, probably guarding a mined road. In its day the cavalry medium tank was one of the best with an all cast turret and hull. However, by 1944 its 47mm gun was no match for Allied tanks. Ken Bell. National Archives of Canada PA43907.

Left: One of the major bones of contention between Rommel and other senior commanders was who had control over the panzers — such as these Panzer V Panthers photographed near Bayeux. Had Rommel been able to get them down to engage the Allied landings, then things might have been very different. Author’s collection.
end only 50% of the anticipated total were ever built and the bilterland was protected merely by barries and small infantry bases. Ronne's inspection tour (on 21 December 1945) highlighted the shortcomings in this area.

Naval Artillery

There was a naval artillery detachment at Ostend.

France

Being the largest country in Western Europe, with long sea coasts on both its northern Channel coastline and on its western coasts which were washed by the Atlantic, France was not only a major problem because of its size but also because certain parts of its coastline were clearly the most likely invasion locations, in view of their proximity to the probable Allied departure ports in the south of England. For convenience we will consider this part of the Wall in two areas the Channel coast and the Atlantic coast.

The Channel Coast

This was clearly an obvious target area. However, due to the fact that the Germans had no knowledge of the revolutionary prefabricated Mulberry Harbours, they concentrated their main efforts in the fortress areas as already listed. In Northern France, the fortresses of Dunkerque, Calais, Boulogne and Le Havre were all well protected, with the Pas de Calais area, encompassing Calais and Boulogne, having several heavy and super-heavy batteries, the best known being the following four heavy naval batteries:

- Batterie Lindemann — just to the south of Sangatte (now of illegal immigrant camp fame) near Cap Blanc Nez, with its four 28-cm SKL/30 naval guns, making it one of the most powerful batteries on the whole Atlantic Wall.
- Batterie Grosser Kurfürst — was at Franneville near Cap Gris Nez, with four 28-cm SKL/30 naval guns.
- Batterie Todt — slightly farther down the coast at the Pointe de la Hocquière, with four 33-cm SKL/34 naval guns.
- Batterie Friedrich August — slightly inland and south-east of Todt at La Trouée, with three 30.5-cm SKL/50 naval guns.

These massive gun positions would all be captured by the Allies during the Normandy landings.

In addition, there were other gun batteries in the area, some in casemates, others in open emplacements, plus bunkers, infantry strongpoints and other defences all along the coast, beginning at Bray-Dunes just across the border from Belgium, while inland there were more bunkers for radars and V-weapon sites. Dunkerque's defences circled the town and included a variety of flank batteries, then extended down to Loon-Plage where the town ends on the coast. This particular fortress would not be captured when neighbouring Calais and Boulogne were taken by the Allied advance in the summer of 1944 and it would have to be liberated by the RAF in late September and then captured by the Canadians. In the Boulogne area at Wimereux (2km north) there was still a bunker from which, it is said, Hitler was to have watched on 15 June the British landing at Sword. The Channel Wall was the first places to be designated as a fortress by the Führer and the town was ringed with gun batteries — both artillery and flak — infantry strongpoints and resistance nests. It had a garrison of about 10,000 men who would fight tenaciously despite being mainly from second-class fortress units. Below Boulogne was Dieppe, which had of course already been the subject of an Allied seaborne assault. Dieppe never received fortress status, but was nevertheless well protected — perhaps the Germans thought that, as the Allies had tried once and before that it would be a likely invasion location, it was to be surrendered without a fight to the Canadians in September 1944. From Dieppe southwards, the high cliffs formed a natural barrier against any assault as far as Fesant le Havre which protected the mouth of the Orne river. It was one of the few-defended of the fortresses on the Atlantic Wall, with a total of 15 gun batteries (eight Navy, four Army and three Air Force Flak) with battery positions, radar bunkers, beach defences, fire control, etc, from Fécamp north to Le Havre down to Deauville and Riva Bella on the coast north-west of Caen. One of the heaviest batteries defending Le Havre was the 38cm naval gun at Le Grand Hameau, which had a range of some 22 miles, covering the mouth of the Orne river.

Lower Normandy

Next came that part of Normandy in which the Allies would eventually strike. The area from the Calvados coast to the Cotentin peninsula and Frestang Cherbourg is well known and will be covered in more detail in later chapters. Suffice it now to highlight just two of the most important batteries, firstly the Merville battery (thought to be four 15cm guns) which was sited about half a mile inland, from where it could have done serious damage to the British landings on Sword Beach, so had to be taken out by an airborne assault in the early hours of D-Day. The second was the nearby Pointe in Calvados, in which was sited by the US 2nd Ranger Battalion on D-Day. The size of the guns was not massive — six 155mm French howitzers, four in open emplacements and two at the Pointe, each containing a 40.6cm SKC/34 naval gun, their 23cm barrels meant that they could reach both the Omaha and Utah Beach approaches effectively, so they had to be dealt with as a priority.

Cherbourg at the top of the Cotentin peninsula was another designated fortress, protected by a considerable number of heavy batteries and strongpoints from Fréneville to Gerville-Hague. It would take the Americans until 27 June before the port was captured, only for them to find that the port's facilities had been so completely destroyed that it could only be used for small craft. The Cotentin peninsula itself was crowded with V-1 and V-2 installations, including assembly plants and launching sites, while the border between the United States and the United Kingdom was the fortress of St Malo, again ringed by defences and with a garrison of some 12,000, who once more would prove a tough nut to crack, the Citadel and the church holding out longest, even when shellied by British battleships.

The Atlantic Coast

On the Atlantic coast France's oldest naval base — Brest — again belongs to the Atlantic Wall. It was the most important German naval base in France, being ringed by at least 20 coastal batteries and flank positions. Its massive garrison of some 35,000 was under Japanese influence as it was in the Marshall Islands. Brest was heavily bombarded by the RAF in late September and then captured by the Canadians. In the Bolognese area at Wimereux (2km north) there was still a bunker from which, it is said, Hitler was to have watched on 15 June the British landing at Sword. The Channel Wall was the first places to be designated as a fortress by the Führer and the town was ringed with gun batteries — both artillery and flak — infantry strongpoints and resistance nests. It had a garrison of about 10,000 men who would fight tenaciously despite being mainly from second-class fortress units. Below Boulogne was Dieppe, which had of course already been the subject of an Allied seaborne assault. Dieppe never received fortress status, but was nevertheless well protected — perhaps the Germans thought that, as the Allies had tried once and before that it would be a likely invasion location, it was to be surrendered without a fight to the Canadians in September 1944. From Dieppe southwards, the high cliffs formed a natural barrier against any assault as far as Fesant le Havre which protected the mouth of the Orne river. It was one of the few-defended of the fortresses on the Atlantic Wall, with a total of 15 gun batteries (eight Navy, four Army and three Air Force Flak) with battery positions, radar bunkers, beach defences, fire control, etc, from Fécamp north to Le Havre down to Deauville and Riva Bella on the coast north-west of Caen. One of the heaviest batteries defending Le Havre was the 38cm naval gun at Le Grand Hameau, which had a range of some 22 miles, covering the mouth of the Orne river.

As far as large coastal batteries were concerned, there were a total of five on Alderney, 13 on Guernsey and eight on Jersey. The largest was Batterie Mirus of 40.5cm guns on Guernsey, the guns being from the Imperial Russian Navy battleship Imperator Alexandr Trots. Also on the islands were the massive Marinepeleltz (observation towers), for fire control, some of which still remain complete today. In addition to coastal batteries and observation towers there were many smaller fortifications, because as will be remembered, the Channel Islands had one of Hitler's fortification orders all to themselves.

Above: Batterie Kertsrom near Brest, photographed in 1944. The machine gun is covered, presumably to protect its working parts from the salt air. Hans Sipari

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Army Group B
By the spring of 1944, Army Group B comprised:

Fifteenth Army — four Army Corps: LXIII, LXXII, LXXIX and LXVII Reserve Corps.

Seventh Army — initially three Army Corps: XXV, LXIV and LXXXIV, plus later II Parachute Corps, LXXXVIII Corps — in the Netherlands.

As D-Day approached more reinforcements reached the divisions within these corps. Some were also refitted and regrouped, whilst others — mainly the reserve divisions — were still training. Another significant change was that, within the OB West area, the tank strength doubled — from 752 in early January 1944 to 1,403 by the end of April. There were in total 16 infantry and parachute divisions, 10 armoured and mechanised divisions, together with 25 coastal and seven reserve divisions, making up the 58 divisions in OB West. The panzer, mechanised and parachute divisions would clearly prove to be the most difficult opposition for the assaulting forces. However, it would be the coastal divisions that they would meet first, and, although they would be fighting from well-prepared defensive positions sited on ground which they knew well, in some cases their fighting ability was suspect. There appeared also to be little depth and no proper second line of defence once the coastal front had been penetrated.

Fifteenth Army
Within the four army corps there were 14 infantry divisions and three Luftwaffe field divisions: six infantry and two Luftwaffe in the front line on the coast; eight infantry and one Luftwaffe in the hinterland. Generaloberst Hans von Salmschnitt, the army commander, was a highly experienced officer, who had initially received a monumentally telling off from Rommel as we have seen, but thereafter was one of his strongest supporters. HQ Fifteenth Army was located at Tournon. The overall organisation of Fifteenth Army as at 6 June 1944 was:

Not shown above is the sixteenth front-line infantry division of Fifteenth Army, the 70th Infantry Division, which was on Walcheren Island and has already been mentioned under ‘Netherlands’.

Seventh Army
Rommel’s other Army was the Seventh and within it were three, later four, army corps, containing a total of 15 divisions. The army commander was a highly experienced, but corpulent, artilleryman, Generaloberst Friedrich Dollmann, who disapproved of Hitler’s methods. He would die of a heart attack in his HQ at Le Mans on 29 June 1944, just two days after the loss of Cherbourg for which Hitler had demanded his dismissal. However, both von Rundstedt and Rommel had refused to sack him and Dollmann died before he could hear of his Führer’s demand. Rommel wished to promote General Erich Marcks, then the very able commander of LXXXIV Corps, who was immediately available within Seventh Army, but Hitler did not approve for political reasons. Instead he chose Obergruppenführer der Waffen-SS Paul Hauser, then commanding 11 SS Panzer Corps, to replace Dollmann.

It was to be the forward units of Marcks’ LXXXIV Corps which would face the initial Allied onslaught. On 6 June 1944, the outline organisation of the Seventh Army was:

Manning the Wall

An Artilleryman
‘On the 5th of October 1943, at the age of 17 years and one month, I was called up for RAD labour service, then afterwards on 24 January 1944, I went to the 318th Replacement Battalion in Leipzig, where I was trained as an infantryman, but I was then sent to 257th Artillery Regiment at Reulen in France. Reulen, some 61km southeast of Rennes, was where I reclined as a gunner on the heavy field howitzer 18 (15cm schweres Feldhaubitze 18), then in the intelligence section and after that as an armamentician with an artillery surveying squad. Having acquired all this knowledge, I was assigned to the “VB” Vorgeschobener Beobachter — an advanced observer, a lieutenant, at the Atlantic Wall.’

That is how Harry Haendler began a letter to me about his job whilst on the Wall. He continued:

Above: An advanced artillery observation officer as ‘VB’ see Harry Haendler’s nemecromancer and his telephone operator, transmitting the orders to the gun battery from Fort OP Thames in the photo (belonging to Seafire Battleaxe of 7.3km 128 in stationed in Guernsey. Ludwig Späth via Guernsey Museum and Gallery.
The bunker was underground, well equipped and protected by a Sow Pak 38 1/60 anti-tank gun and a machine gun, which were part of an infantry base with a garrison of 50 men. The location was ideal for the living quarters. Our VB-Stand [advanced observer position] was in this bunker. The artillerymen had our living quarters in a villa about 100 meters directly at the edge of the sea. We got our ration from the infantry, but the food was not particularly good, after all, we were in the fifth year of the war. However, life was agreeable for us artillerymen, as we could speak on an external line to our battalion and could also communicate on the beach. We also had to rummages into the ground around the position which were then connected by wire — the ‘Rommel-Käfig’ — to protect us from airborne troops landing. There were three of us in the VB-Stand — the lieutenant, a lance-corporal and myself.

‘Our guns positions were located about 300 meters away in a gigantic concrete bunker. Our regiment was horse-drawn. We practiced firing out to sea, observing the impact positions of the shells and making corrections. We didn’t use moored targets. My job was to transmit the fire orders to the guns from our VB. Our Regiment was part of 275th Infantry Division and a few days after D-Day, on 10 July, we were transferred to Normandy, where I was wounded by a shell splinter through my nose during the Falaise battle.’

In his book Hitler’s Legions Samuel Mitcham describes 275th Infantry Division as consisting of just ‘the divisional staff, one regiment of heavy artillery, one regimental gunboat artillery unit [Harry Handley’s] 275th Artillery Regiment], two battalions of ‘old men’ and little else’. So the area in which they were located initially had to be defended by the divisional staff and one regimental gunboat from 343rd Infantry Division, together with two more battalions from the previously withdrawn 243rd Infantry Division. It also contained 27 companies of anti-tank troops, seven ‘Eastern’ battalions, a Russian bicycle detachment, a Russian engineer company, the latter being on loan to the Normandy sector to help install minesfields — quite a mismatch! They were sent to the fighting in Normandy on the first day of the Normandy Lehr Division, but were practically annihilated by the American breakout operation (Operation ‘Cobra’), then reduced even further in the Falaise pocket and finally listed as ‘destroyed’ by the commander of Seventh Army. What was left of the division was then taken out of the line and rebuilt. It then went on fighting and took part later in the battle of Hürtgen Forest and finally ended the war in Czechoslovakia.

An Infantryman

‘At the beginning of 1944, as a young soldier of 17 and a half, I joined the new 275th Division in Brittany. This division was raised in the area of St Nazaire and Redon, on the edge of the Atlantic coast.’

That is how infantryman Roland Fischer began his reminiscences. He continued:

‘At first I was assigned to a Schützenkompanie [rifle company] near Pontchâteau, but as signalsmen lacking I was later selected, with a comrade, and sent to Redon for training. This was also the headquarters of the division. During March and early April I was in the little town of Redon. Spring was beautiful then and we were already glad to get outside. Everything was turning green, but the greatest number of people and officers for a further fronts reminded us of the war. We were on the outskirts of the little town in separate barracks. Here we lived, ate, and had our holiday pass and was signal training, in the afternoon infantry training. In addition we had lectures, cleaned our guns and our boots and mended our uniforms. Our lunch breaks were sometimes shortened as we had to dig trenches behind the shells. Borowing we had been dead tired after all the physical strain. And, when at roll call, something was not tidy enough, then you had to do punishment drill on top of everything else. I had good comrades and we helped each other. My best friend from Plauen (Saxony) was afterwards killed in Normandy.

‘The food was good. As most of us were under 18 we got some additional food. Artillery units were stationed near the town, and there, on the outskirts, was a canton. Sometimes in the evening I went there to have something. Later I helped a Feldlachen [sergeant]. I got the meals for him and he always tipped me.

‘Here at Redon, there was a divisional band, which sometimes played during the day. When the weather was fine and the windows open, we listened to the nice melodies. One day, during weapon training, I hadn’t paid attention and gave wrong answers. I was sent out to run around the shack. As it was a good runner that didn’t bother me. I stopped at a corner and listened to the band. Finally I heard something comprehensible to me. When I was asked where I had been, I answered: “the song — La Paloma — sounded too sweet.” Fortunately the NCO was a rather short-sighted, which took place in a quarry outside the town. We had to march there. When it was my turn to line I was lucky and was immediately sent to the young man, so the officer on duty allowed me to have some time off. I walked alone through a Russian countryside, until I came to a well-encumbered booklet with lines under the terms I had tried to remember — greetings, talk, thanks, numbers, food, etc. We couldn’t see anything but we had heard the signals, I saw a house where a soldier was standing outside. I went in his direction and called to him. He shouted “Hello! There is an order!” He showed me a wave of his arm and I got the letter and learned that I had walked into a minefield. A soldier then showed me where the soldier’s leg had been blown off. I ran back trembling.

‘One weekend I was detailed for staff guard. As the house watchman we had taken over a bicycle. I had always liked cycling at home and so it was a nice change for me to ride through the beautiful countryside. Here among the usual routine we saw signals and did guard duties. Now and then we got letters from home, from my mother, from friends in our village. This was our and the lonely summer weather helped us to keep up our morale but what would happen? I often talked with comrades. Will the Allies attack France? There were so many rumours. But no, one knew anything definite.

‘Then, all of a sudden, the moment came. Early on the morning of the 6th of June 1944, the invasion of Normandy began. With us there was alarm everywhere, we had to be ready for possible action. Will they attack Britain? For the time being nothing happened. The next day I wrote to my beloved and told her that I was at another bunker, opposite the cemetery, where I had to work in a radio station with another soldier. He was from Danzig and often told me about his home. We would sit in the gathering dark and talk. I liked to eat cheese, but once when I looked at it closely I saw it was full of maggots — that wasn’t the way I like my appetite! In front of us there were several trenches. One evening, I was standing in one of them when, heard something rustling in a nearby tree — it was a mouse doing here? Be off!’ I bit my teeth and at the time feeling they ran away. I made haste to finish and as I went down into the bunker, the rabble of rats came round the corner again.

‘Soon afterwards the alarm was given to our Regiment 985. We got our marching orders after the other two regiments — 983 and 984 had already left for Normandy. First of all we concentrated at Savannah to make final preparations. We, the signallers, went there with three infantry carts, I marched along the road with a horse. For three days we camped there in tents at the edge of a wood. Our equipment was checked and unserviceable items replaced. Unnecessary things were thrown away, the regimental library was broken up and whoever wanted to could get himself a few books. I was of course interested in books and had grown up with books since my childhood. I filled my knapsack and bags with books. Soon after our regiment marched towards Normandy. Horrible waiting time, I felt to be between them the columns of soldiers marched. In front of our group was an older soldier. He began to sing “Farewell at Sedan” (Far away at Sedan) and we all joined in. Thus we marched into the night towards an uncertain fate.”

As already explained, Roland Fischer’s division 275th Infantry Division was involved in the battle around St Lo, in the Department of Manche, to try to counter the American breakout operation (Operation ‘Cobra’). Near Marigny his regiment was involved in a bitter engagement and he recalls there being a total of 11,000 German casualties in that area. He was wounded and evacuated, but later in the autumn he was sent back to the Western Front again.

A Specialist Engineer

Gerhard Koch was sent from Germany to the fortress ‘Gironde South’. He was a member of a fortress engineer company (Festungskompanie) at Neuhaldenstein. He was in the signal interception platoon, but there were also some Goliath/Linzer (Goliath drivers) attached. Goliath was a small remotely-controlled demolition vehicle, which he would drive. It could be used against tanks, pillboxes and such like. Gerhard was stationed at Knoles — the most southermost point of their area. The garrison was withdrawn in July/August 1944.

A Naval Gunner

The last of these reminiscences of men who manned the Atlantic Wall comes from Hans Seppi, who lived — and still lives — in
Coxtiiv, where his father was a senior sergeant in the marine artillery, so he grew up in a naval atmosphere. Hejoined the Kriegsmarine between the wars and by the outbreak of war had completed several courses both as a recruit and as a naval artilleryman. He was a member of 4., Marineartillerieeileabteilung Standort Coxtiiv. Apart from an occasional "Submarine Alarm!" which meant shooting into a designed grid square, they were not involved in any sea battles, but helped with the air defence (Hagabewehr) of Coxtiiv. Their first posting was to the island of Sylt. He did not remain a simple gunner for long, due to his previous training, and was rapidly promoted to MA Gefreiter ( lance-corporal of naval artillery). In May 1940 his battery led Sylt, moving first to the Netherlands then to Belgium, where he was stationed at the long mole of Zeebrugge. From there he went to Calais and in November 1942, he moved to Sète on the French Mediterranean coast. "I left odd walking around in the zone which had been unoccupied France until then," he recalled.

"I attended a Schießlehrerausbildung course at Toulon [learning how to direct the gatet] by which time I was a MA-Oberfeldwebel mit Ewigung am Offizier [sergeant first class suited to become an officer] and was invited to attend a course for future officers, but instead I was captured on 23 August 1944."

"I found that performing one's duties in a fortress engaging targets out to sea [serzelaufstellung] was boring. The battery had to be on the alert permanently and only two or three men could "go ashore" [leave the position] at a time. Even this was impossible when some of the crew were away in sick-bay or hospital. Besides, the fort was usually too far from the town to get there on foot. Senior officers and NCOs therefore had to take care that their men did not just become "zombies." It was definitely not enough just to know how to do one's job in the Litauis (observation tower) so well that you could do it in your sleep, but it was also essential to keep up the men's morale by sports etc. As well as the occasional firing at targets moored to ships or towed by them, the instructors had to come up with more and more ideas."

For a long time Hans was a Belzhibhemmerle [that is one who transmits orders], a post known for short as a BUE. The BUE was connected to the Schießlehrer (the one who directs the fire) and who worked with another man who operated the range-finder (Erfeuerungsmessergerät). The orders were transmitted to the BUE who also got all the necessary information from the different artillery instruments, then worked out and passed on the appropriate fire orders to the guns. Finally, after getting the range of the target he would order "Dauerfeuer" (continuous bombardment). The naval artillerymen wore grey uniforms when manning their guns. This was not the field grey of the Army but rather a grey-green colour with gold insignia rather than silver.

Below: This group of Atlantic Wall troops, from 7th Infantry Regiment of 7th Infantry Division which was located in the Caen area, are clearly Ostrophen, their Mongolian features being quite pronounced in some cases, whilst the officer with the putter wears a yellow armband, which shows that he is from Turkistan. J. P. Kamity Collection

Life in Other Garrisons
"We know relatively little about how the German soldiers experienced short period of service at the fortified installations along the coast. Official documents allow us to describe the external framework of the soldiers' lives to a certain extent, but personal accounts by Germans stationed in Denmark during the Occupation are few and far between.

That is how Jens Andersen opens a chapter about the daily life of German soldiers stationed on the Danish part of the Atlantic Wall, in his book The Atlantic Wall — from Arger to Bulbjerg. He goes on to explain various aspects of their lives, commenting that in general terms there were often friendly relations between the local population and the soldiers, who were often invited into people's homes in small local communities, where it was difficult to regard the Germans as enemies — or to put it another way, the enemy had assumed a human face. 'I did not have a single enemy here,' wrote Hermann Kündel, who was stationed at Lynghy.

Every night, early in the morning or late in the evening I drowsed to Bedsted and back and I was never afraid... Our battery commandant, the Captain, was also very correct and proper in his behaviour. We had no problems or animosity with the population in Lynghy.'

Whilst relations with locals were generally good, the boredom and stress of being constantly ready for action in the more isolated defensive positions clearly affected some soldiers:

"The fact that so many soldiers were gathered together in one place with so little room and little chance of entertainment was bound to create tension and the men easily got on each other's nerves."

In an interview in 1979, Heinrich Albrecht, who had commanded an Army coastal battery in Lynghy, gave an example of what he called men going 'bunker-mad' or 'dune-mad', explaining how one particular soldier had completely lost control of himself because of another man's snoring and had Borged him over the head with a coffee pot, after which the whole crew of the bunker were suddenly at each other's throats. Albrecht had to fire a shot in the air from his pistol before he could get them to calm down. Those who could not compete with the boredom of course had an easy remedy — to volunteer for the Russian Front! Hardly surprisingly, most preferred the peaceful situation in the isolated gun sites to the dangers of front line service.

Foreign Visitors
Despite all its drawbacks and problems, Hitler was incredibly proud of his Wall and continually invited military missions from allied or neutral countries to inspect it, especially those fortifications built on the Channel coast. Von Rundstedt's chief of staff, Günter Blumentritt, says in his biography of his commander:

"In the west there was an increasing need to invite military missions from allied or neutral countries to inspect the Atlantic Wall. Hitler was very proud of his "Wall". One year after another Turkish, Bulgarian, Hungarian, Finnish, Romanian, Italian, Spanish and other missions arrived, with generals at their head."

He goes on to say that von Rundstedt's international reputation imbedded all these visitors with the desire at least to see him and, if possible, to talk to him. 'When the visitors arrived he was amicably himself and all foreign guests were charmed with him.' This was no mean feat as von Rundstedt had a very low opinion of the "sacred" Atlantic Wall, openly describing it as his staff being merely a 'propaganda bluff'.

Notes
1. Louis, The Last Year of the German Army, using unit returns sent in to the Organisational Department of the Army High Command.
2. Louis, The Last Year of the Wehrmacht, 1943-1945.
3. Extracts from Coast Fortifications in Denmark 1930-1945 by Peter Thomsen Christensen
4. The area covered was of course not the entire Atlantic Wall — see page 36 for the total figures.
5. There was another "Southern Wall" built in southern France, to protect the areas Nice to Marseilles and Toulon to Nice. There have not been included in this survey, although, as will be seen from Hans Sippl's reminiscences, he did serve there for part of the time.
6. It was the Forward Observer, i.e. what the British Army calls a FOO or Forward Observation Officer, who acquired targets, passed details back to the gun positions and subsequently command their fire.
7. The lecher Ladyasteger (Ed. Stützke, p. 302) (E-Monoclic), to give its full title, weighed 63.77 tons and was just 5.15m long. As curator of the Tank Museum I had one which I used as a collecting box before we started to charge for admission. Children loved putting their money in it!"
Below left:
This is a Dutch Vestdijk (dike) remotely controlled tracked demolition charge, still in its box, being inspected by a British sergeant. Weighing around 54 tons, it was packed with explosive and designed to blow up tanks or pillboxes or clear minefields. The remote control mechanism was, however, extremely delicate and under any strain the least hiss, crack or squeak would cause it to judder to life.

Below right:
An open, banking emplacement for the 75mm field gun, on the French coast, gave it a good shot along the beach, which was itself covered in rows of obstacles.

Right:
'Auf Wiedershenen Liechtenstein! Members of the Wall garrison bid farewell to a painted lady in the make-believe window of this camouflage building. Bundesarchiv

Below:
A 15.5cm field gun in an open mounting in northern France. As explained in Chapter 3, such guns were not subjected to great damage when bombarded — unlike those in concrete emplacements — always provided the crew was properly protected. Bundesarchiv

Bottom:
A light anti-tank gun (probably a 4.2cm Whi 41), being manhandled out of its shelter and into its firing position. Photographed in northern France/Belgium during the early summer of 1944. It appears to be providing flank protection to a series of larger bunkers near the sea. Bundesarchiv
Chapter 9
D-Day: The Major Assault
‘We Were Blind’

The first indication that Normandy was threatened came in April 1944 when the Allies’ intentions were not known. Only then were reinforcements sent to Normandy. However, we did not know whether the invasion would take place only in Normandy or whether another would follow later in the Fifteenth Army sector. We knew that a large-scale invasion had been staged in England and that travel by diplomats and all leave had been cancelled. However, we did not know that the invasion was intended to be launched . . . for the following reasons:

(a) Our aerial reconnaissance did not get through and was able to bring back only scattered individual reports.
(b) On the sea, our E-boats and destroyers were too few to fulfill their mission.
(c) We had only five or six agents in England at the most.

Consequently we were “blind” and did not know what was going on more than a few miles beyond our coast.

The Waiting Game
Just prior to D-Day, Rommel had been doing his best to get the Führer to visit the Western Front, so that he could explain ‘on the ground’ the up-to-date situation and make him realise how short his Army Group was of both men and materiel. He also wanted to impress upon the Führer the vital need for Army Group B to be able to control the deployment of the panzer divisions in the German-occupied territories. Parliament.
Rommel also wanted to acquire at least two more panzer divisions, a Luftwaffe flak corps and a ‘Nebelwerfer brigade’ for Normandy. However, when it became clear to him that Hitler would never come, Rommel decided to go to see him instead.
He cleared this proposal with both von Rundstedt and Schirach, the Führer’s adjutant, and agreed a personal interview for June. Interestingly it had been decided by OKW that the period 5–6 June would be an unhappy time for the Allies to contemplate any invasion, because the rides were unfavourable and none of the limited Luftwaffe reconnaissance reports had given any indication of pre-invasion action — but of course, already explained, their capability was very limited. Rommel also wanted to go at this time for personal reasons. He was anxious to see how the 6th, so the could go to Berchtesgaden via his home in Herrlingen and see Lucie — admirable! However, as air travel had been banned for several weeks beforehand, because of the danger from Allied aircraft, Rommel set off by car on the 5th and so was at home on the fatal night of 5th June.

On the other side of the Channel the Allies had been building up a massive Army in the United Kingdom, comprising many thousands of American, British, Canadian and other Allied troops with a vast array of state-of-the-art weapons, vehicles and equipment, backed up by a large number of Navy and Air Force units, with an overall estimated total strength of more than three million men. Considerable lengths had been gone to, to keep Operation ‘Overlord’ as secret as possible, including the setting up of an entirely fictitious Army group under the leadership of General George S. Patton. Operation ‘Fortitude’ was designed to convince the Germans that the actual main Allied landings would take place in the Pas de Calais area, opposite Dover, at the narrowest part of the English Channel. Patton was an integral part of the deception plan, because he had apparently ‘disappeared’ after the stepping incident in Sicily, then reappeared in England. The Germans rated Patton as being by far the best Allied field commander at that time and found it totally illogical that he would be barred from army command for such a trivial reason. Thus he fitted the bill perfectly and the Germans believed that the network of dummy radio stations, dummy camps and storage depots and other facilities which had been built in south-east England and which their small number of reconnaissance aircraft had obviously seen, were in fact the main invasion force and aimed at the Pas de Calais area. The plan would work perfectly and the Germans would continue to expect a major landing in the Pas de Calais, while Patton would gleefully tell his Third Army troops in his own colourful way:

‘I’m not supposed to be commanding this Army. I’m not even supposed to be in England. Let the first bastards to find out be the Goddamn Germans. I want them to look up and bow, “Ach! It’s the Goddamn Third Army and that s.o.b.of-a-bitch Patton again”’

Meanwhile, back in France, at HQ Fifteenth Army on the evening of 5 June, the headquarters radio intercept had, as normal, been carefully monitoring the BBC’s coded broadcasts to the French resistance and had come to the conclusion that the invasion would take place at some time within the next 48 hours. Although the army commander, General von Salmuth, was not himself entirely convinced by his intelligence staff, he wisely put his army on full alert and authorised the sending of the following message to his corps headquarters and other relevant units:

Broadcast from BBC 22.15, June 5 has been processed. According to our available records it means: “Exploit invasion within 48 hours starting 06 June.”

This message was also sent to OSt West, which passed it on to OKW. Fifteenth Army did not, however, send the message on to HQ Seventh Army as they rightly expected Army Group B to do this. Further down the line within the Seventh Army sector, General Erich Marcks was in the command post of his LXIVarmee Korps, where his staff had planned a small part to celebrate his 54th birthday. The party mood was, however, somewhat dampened because the intestine, battleworn Marcks was very disturbed by enemy activity in his area and was not in the mood to celebrate. He was still there at 01.11hrs when the commander of 716th Infantry Division, Maj.-Gen. Wilhelm Richter, suddenly reported on his field telephone that the enemy paratroops had landed east of the River Orne. A few minutes later, Marcks’ chief of staff telephoned HQ Seventh Army and spoke to the army chief of staff, General der Infanterie Joachim Plemel, who passed on the information to General Speidel at Army Group B and then put Seventh Army on full alert. Plemel later made further calls to Speidel in the early morning, to reinforce the report seaborne landings.

At Rommel’s HQ, Hans Speidel was in charge when the first reports came in about the paratroop landings near Caen in and in the south-east of the Cotentin peninsula. Their strength and purpose were not immediately clear but he ordered all units to battle stations. Further reports of more paratroop landings followed at 03.00 and 04.00hrs. Speidel, however, remained sceptical about the landings, especially when Gummistruppen (small size, but lifelike rubber models of paratroops) were declared dead paratroops whilst they were descending) were being found. This reinforced his opinion that the Normandy assault was just a faint, designed to disguise the true concentration of forces in the Pas de Calais area. Waves of Allied aircraft were now detected approaching the area. At 03.50hrs, a hotchpotch had begun. Coastal defenders put into action their automatic defence measures and the codeword Operation ‘Normandy’ was sent out from HQ Army Group B and relaxed down to field formations. Unfortunately for the defenders, the complete Allied air superiority prevented any visual confirmation of what was happening. Speidel rang Rommel at Hertingen about 06.15hrs, explained the situation and told him what action he had taken. Rommel approved all the measures and told Speidel that he would return to La Roche-Guyon immediately. Cancelling his visit to Hitler, the Desert Fox was soon on the road, leaving home at about 10.30hrs with just his aide, Hauptmann Lang, and his driver Oberleutnant Daniel. Despite having to use side roads to avoid Allied aircraft, they were back safely at their headquarters by 20.00hrs.

As the reports of the Allied landings built up, von Rundstedt gradually came round to the conclusion that this was a major assault. Quite against his own standing orders, he began to release elements of Panzergruppe Oest and to meet and then forward them. He asked OKW to release more armour, but could not get an answer as the staff did not dare wake Hitler, despite OBWest’s growing annoyance. Schmidt finally woke Hitler at 03.30 and summoned Joell and Ketel to give him a full briefing on the situation. Afterwards it was said that Hitler was quite happy about the invasion news, appearing eager to get to grips with the enemy. Still, however, no one could actually decide whether this was the real invasion or not. This pattern would continue throughout D-Day, with the commanders at the Leipzig in the appropriate action, committing their forward troops to the battle, sending out reconnaissance to discover exactly what the enemy was doing, then inevitably requesting armoured support to help them deal with incursions that were too powerful for their limited resources. This was not easy even when permission had been given to release armour, due to the complete Allied air supremacy, which barred every daylight move.

The Allied Landings
The Allied seaborne landings had all taken place in the Seventh Army sector. British and Canadian vessels had landed as three carefully selected beaches code-named Sword, Juno and Gold, all of which were located within the 716th Infantry Division’s sector, running north from Ouistreham to Cherbourg. The American First Army had landed to the west in the 352d Infantry Division’s area between Veules-le-Quevilly and code-named Omaha Beach — then some 24km further west on Utah Beach around La Madeleine in the 709th Infantry Division area. The seaborne forces had been met by substantial opposition of airborne troops some four and a half hours before the first amphibious troops hit the beach, with the British 6th Airborne landing units in the early hours, whilst in the west US 82nd and 101st Airborne Divisions landed north of Caenarvon around St Come-du-Mont and St Mère Eglise.
So much has been written about D-Day and the operations which took place on June 6, 1944, that it would be pointless to report here exactly what happened on each beach and during every moment of the assault. What I propose to do instead is to give some examples of different actions in differing locations, which concentrate on attacks against one or more of the various elements of the Atlantic Wall, for example the infantry strongpoints and the coastal gun positions, and to explain how the incoming assault troops dealt with the mass of defensive obstacles which had been so painstakingly erected on or near to the beaches.

Utah — the Seaborne Assault

The defenses along what came to be known as Utah Beach were manned by the men of 709th Infantry Division. Since the arrival of Rommel, construction activity had greatly increased within the defensive belt. On the beach were rows of obstacles at a distance from 50m to 120m from the shoreline seawards. These comprised rows of stakes or piles sloping towards the sea, steel hedgehogs and tetrahedra. Belgian Gates (also called ‘Element C’) were used to block roads or passes where mobile obstacles were needed. Defences immediately behind the beach along the sea wall consisted of pillboxes, tank turrets mounted in concrete structures, Tornooj pits, firing trenches and underground shelters. These were usually connected by a network of trenches and protected by wire, mines and anti-tank ditches. Concrete infantry strongpoints provided interlocking fire and were armed with both fixed and mobile light artillery pieces. One such area, the strongpoint at Les Dunes de Varreville, was directly opposite Green Beach, and it was designated as the first objective of the 1st Battalion, 8th Infantry, 4th US Infantry Division. The fixed infantry defenses here were more sparsely located than those on Omaha Beach (see below), probably because the Germans relied here on the natural obstacle provided by a flooded area directly behind the beach. At or near the beach the defenses basically comprised a line of infantry strongpoints armed mainly with machine guns, whilst some 3km inland on the coastal headlands behind Utah Beach, were several coastal and field artillery batteries, the most formidable being those at Ceriseq and St Martin de Varreville, where heavy and medium guns were housed in a series of concrete forts sited to cover both the sea approaches and the beach areas. In addition to the organic field artillery in 709th Infantry Division, there were various Army and Navy coastal artillery and flak battalions, whilst the division itself had been reinforced with the 17th Machine Gun Battalion and men from 342nd Infantry Division.

In one of the German strongpoints (W5) which was the one directly opposite Green Beach, was Second Lieutenant Arthur Jahnke, a platoon commander of the 3rd Company of 919th Grenadier Regiment, from 342nd Infantry Division. His platoon had gone to action stations when reports had been received of paratroopers being dropped behind their positions during the night. He had doubled his sentries and sent out a patrol to investigate. Half an hour later, firing was heard amongst the flooded fields behind W5, and some minutes afterwards, the patrol returned with 19 prisoners who were taken to an empty troop bunker further back in the dunes, locked in and left under guard.

W5 and the other beach defence positions had not got their usual early evening bombing on the 5th, but later, towards the early dawn, Jahnke heard the drone of twin-engined bombers. They appeared at first to be flying to the north of his position, but then turned and flew directly towards him. Soon his position was being heavily bombed. He managed to get out of his open trench safely and find some better cover, but the bombing played havoc with the strongpoint and blew up the reserve ammunition bunkers.

"All the fortifications they had laboriously dug and built through the weeks had been churned up like a child's sandbox. The 88mm anti-tank gun was a heap of twisted metal. The 88mm gun had taken some shots from its breech. Two ammunition bunkers had blown up. The machine gun nests had been buried by avalanches of sand. Casualties
Fortunately, they were small, since the men had been sitting in their bunkers. True, the bunkers had been hit, but the bombs had not pierced the reinforced roofs.

Fortunately there was then a short breathing space in which they were able to start clearing some of the trenches and repairing some of the damage, but not for long. Enemy aircraft came again — and this time they were clearly intent on destroying the ‘Enemy aircraft take cover everybody!’ A new wave of aircraft came roaring in from the sea just a few feet above the water. Then, just over the coast they gained height, banked, and began to attack W3 with rockets and cannon-fire. Clearly they knew exactly what they wanted to hit and swiftly destroyed both the two corner bunkers which housed 50mm guns, Jahneke recalled:

“When the attack was over both bunkers and guns were only rubble and scrap metal. The crew had been killed or severely wounded.”

It was still only 04.00hrs, and, as the bombing lifted, it was replaced by shellfire from the mass of warships out to sea, which began firing at the positions on shore, Jahneke’s field gun (an old FK-16 light field howitzer, first issued in 1916) started to reply, as did the 8.8cm Flak, but soon both had been hit and destroyed.

The heavy naval bombardment began. Continuous uninterrupted hell. Blows upon blows the huge shells crashed into the stronghold. Trenches were levelled. Barbed-wire torn to shreds. Minefields blown up. Bunkers were drowned in the loose sand of the dunes. The stone buildings and the telephone exchange crumbled. The fire-control post of the flame-throwers received a direct hit. Many men broke down under this hurricane of fire. They pressed their hands over their ears. They screamed. Others lay in the sand, weak with despair. Posts were no longer refired.

“Then there was a cry shout: ‘The ship!’”

The American report on the action at Utah Beach says that 276 Marsaud bombers of the Ninth Air Force dropped a total of 4,404 250lb bombs on the seven objectives on the beach. It makes the special point that the stronghold at Les Dunes de Varreville, Jahneke’s W3, received more bombs than any other target, because of a conspicuous tank ditch which surrounded the area and ‘persuaded pilots to unload on it when their briefed targets could not be located’. At 18 minutes 40.30hrs (05.30hrs) the warships of the bombardment group began firing on the shore batteries, whilst, as the assault craft started for the beach, the fire support group (33 variously equipped smaller craft) began the process of ‘beach drenching’. Some 17 of these craft mounted batteries of rocket launchers and discharged theirrockets when the first waves of assault craft were still about 6-700m from shore. There were misfires with some of the control vessels, which delayed the tank landing craft, but the first wave of 20 LCVPs (Landing Craft Vehicle/Personnel) each containing an assault team of 30 men from the 8th Infantry, reached the line of departure on time and were all then despatched in line abreast.

Support craft to the rear were firing machine guns, possibly with the hope of expelling mines. When the LCVPs were from 300 to 400 yards from the beach, the assault company commanders fired special smoke projectors to signal the lifting of the naval support fire. Almost exactly at H-Hour, the assault craft lowered their ramps and 600 men walked into waist deep water to wade the last 100 or more yards to the beach— Enemy artillery fired a few air bursts at sea, but otherwise there was no opposition at H-Hour. The morale of the assault troops was excellent. “Goddamn we’re on French soil!” They were obviously relieved and happy that this was not another “dry run”.

The infantry were soon backed up by amphibious tanks, against which Jahneke’s only defences were a half-buried ancient French Renault tank, which was soon knocked out by the Shermans’ more powerful 75mm tank guns, and finally, the Cotilaths — remotely-controlled tracked demolition charges, which he called “two-pocket wonder weapons.” In this case, however, the continual bombardment from air and sea had damaged their delicate steering mechanism and it proved impossible to guide them properly to the American tanks.

In fact there had been some errors in the locations where the 8th Infantry should have landed and where they actually finished up, which was some distance to the south. Part of this was caused by the loss of some of the control vessels, also by a strong tidal current, not to mention the difficulties in seeing the beach just prior to the final push. The dust, sand and smoke from the ‘beach drenching’ mentioned earlier. However, this actually all worked to the advantage as the beach further south was not so well protected by the assistant division commander (Brigadier-General Theodore Roosevelt) volunteered to take the initial attack on the beach strongpoints. This worked admirably. He would later be awarded the Congressional Medal of Honor, America’s highest battle award. He gallantly and intrepidly at the risk of his life above and beyond the call of duty, for his continual acts of bravery that day. His citation tells how, having landed with the leading troops, he led groups from the beach, over the seawall and established them inland. It goes on to say that:

His valor, courage and presence in the very front of the attack and his complete unconcern at being under heavy fire inspired his troops to heights of enthusiasm and self-sacrifice. Although the enemy had the beach under constant direct fire, Brigadier-General Roosevelt moved from one locality to another, rallying men around him, directed and personally led them against the enemy. Under his seasoned, precise, calm and unflinching leadership, assault troops reduced beach strongpoints and rapidly moved inland with minimum casualties. It is thus contributed substantially to the successful establishment of the beachhead in France.

In W3, Jahneke and his men waited in vain for reinforcements. Unfortunately the reserve units were sent into action too late and no artillery or armour supported them. Thus they were unable to break through the American paratroopers who had now established themselves in the hedgerows and orchards inland, thus preventing the Germans from reaching the beach.

“Towards noon on June 6 only a few sporadic rifle bullets were being fired from the churned-up trenches of the infantry dugouts on this dune — useless rifle bullets against tanks that were by now standing outside the anti-tank wall. As if they were on a practice range, they were firing point blank into the stronghold. The American infantry had also moved up right against the anti-tank wall. But they did not yet risk leading over it... With renewed fury the tanks blasted away at the stronghold. ‘Then this is the end’ flashed through Lieutenant Jahneke’s mind. Then he felt as though someone was slowly pulling a black curtain over him. In his half-buried dugout he had not heard the shell being fire, but he had just seen the impact flash on the edge of his earth hole. He had felt the blare in the small of his back. The cascade of sand was coming down on him like a nightmare. This was the end.”

Fortunately for Jahneke he was pulled out of his grave by some American soldiers and became a prisoner of war. Later, when he even got off the beach, he would be wounded by gunfire from a German battery of 17cm guns. His account of the destruction of W3 must have been repeated all along Utah Beach, as the Americans systematically reduced the immediate strongpoints so that they could move inland.

“These were field fortifications placed to cover the enemy roads; they were not formidable. They were all taken by forces of company size or less against light opposition. Other troops cleaned out houses along the roads and found all kinds of ammunition. They were under some shellfire in the operation against the beach and in reorganising for the advance inland.”

‘Bloody Omaha’

If the landings on Utah Beach had gone “according to plan”, this was not to be the case on Omaha. Here is how one officer in 352nd Infantry Division, who was commanding troops in Omaha Beach, described it: "The enemy coastal garrisons, apparently demoralised by the preparatory bombardment, showed little fight some did not fire at all. Two or three farms were consumed in eliminating the opposition in the area and in reorganising for the advance inland.”

‘At the water’s edge at low tide near St Laurent and Vierville the enemy is in search of cover behind the coastal zone obstacles. A great many motor vehicles — and among
Left:
Troops carrying heavy weapons equipment make their way through the surf in the Fox Red sector of Omaha Beach, where Company L of 16th Infantry used shelter before moving right to assault the F-1 strongpoint. (US Army via Real War Photos)

Right:
An old French 75mm field gun which was used part of the German defences on Omaha Beach area. The Canon de 75 modèle 1897 was probably the most widely used light field gun ever produced. It even went on in worldwide service for many years postwar. (US Army via 1st Infantry Division Museum, Carlisle)

Left:
Bloody Omaha. Smoke from grass fires obscured the ploughs in a number of sectors, notably at Dog Red, as troops prepared to land. (US Army via Real War Photos)

Above:
Troops and civilians labourers—presumably GI workers—have been rounded up by two GIs, one of whom is wounded, on Omaha Beach. (US Army via Real War Photos)

Left:
This captured enemy blockhouse which protected the E-1 drive (west side) has become a temporary HQ for the Engineer Special Brigade Group. This unit operated Omaha Beach as a port of supply until December 1944. Pictured, the blockhouse became a battle monument. (US Army via Real War Photos)
places. However, he also said that casualty figures were rising because of the continuous fire from naval guns and the off-shore landing craft, so he was in need of reinforcements. He also reported that the strongest concentration of calibre from 75mm to 88mm; 35 pillboxes were occupied by lighter guns and there were about 15 antitank guns (37mm to 75mm). The heavier guns were situated on a lateral fire along the beach, with traverse limited by thick concrete scuttelettes which concealed the flash of these guns and made them hard to spot from the sea. Mortar positions were sometimes included in the strongpoints but were more often on temporary scaffolds. About 40 rocket pilots were later found, located several hundred yards inland on the high ground and each fitted to fire four x 120mm rockets.

The considerable area between the strongpoints was supposed to be protected by their flanking fires, by minefields scattered on the beach flat and the slopes of the bluff, and by machine gun emplacements along the crest. While the line of defence was not continuous, no areas of the beach were left uncovered in the pattern of defensive fires. Nearly all weapons, machine guns as well as artillery pieces, were sited primarily to give lateral fires along the length of the beach, and the defence of a given sector usually depended as much on the flanking fire from neighbouring positions as on the emplacements in the sector itself.

The account goes on to state that the Omaha sector was not strongly defended as far as coastal batteries of heavier guns were concerned. However, it makes a specific point of mentioning the battlecruiser which is believed to have been six French 155mm howitzers, partly mounted in casemates, at Pointe du Hoc, some 3,000m west of the beach.

This position was regarded as the most dangerous in the American zone, for the guns of that calibre could not only the US V Corps landing beaches, but also both transport areas. There were other dangerous batteries, including some in the British landing zone (for example at Port-en-Bessin) which could also be a threat to the landings, but Pointe du Hoc was the most important and would have to be "taken out" by a special Ranger force.

Someone who vividly remembers the beach defences at Omaha is Lieutenant Tony Carter of Wareham who was a member of the crew of the large LCA. One of four Belgian cross-Channel steamers requisitioned by the Admiralty for service in Clovelly the day before, and actually converted in the docks and fitted to carry seven LCA in davits, one of which he commanded on the run in. They had already taken part in the Dieppe raid, then Sicily, and now he was with the American Rangers to Pointe du Hoc, as will be recounted later. However, this is what he had to say about the beach defences:

I still have quite a clear picture of these defences, although I cannot guarantee the accuracy of a memory that is 60 years off. The principle part of the defence consisted of rows of posts running out from two prominent high water marks, at right angles to the beach, in straight lines and angled at about 30° to the vertical, pointing to seaward. It was possible to turn an LCA round between the rows of posts, as the rows must have been placed some 40 feet apart. Many of these posts had Teller mines wired to their tops. As we were coming in at low water, all these were above our heads. I am unable to remember seeing such posts, or their remains, on any of the other beaches that we visited in the weeks immediately after D-Day, but I expect they would have been systematically worked as quickly as possible. As the end of each of the avenues formed by the posts was a device we referred to as the "fire-barred gate" or "mounting Flemish Gate" as it was known officially. This was of course rather like a very large fire-barred gate and it was always referred to by Teller. This device must have been placed a little way out from the last posts in the avenues and I can remember having to carry out a sort of letter "S" maneuver to get in. That makes me think that the planners of the operation must have had a pretty good idea that this was possible, or there would have been some provision made for its destruction. When I returned to the beach, some 20 minutes after the initial landing, there was certainly no Element C and there was an LCI (Landing Craft Infantry) on the beach, so I imagine that she must have charged the device and destroyed it on her way in. I am unable to hazard a guess as to the number of posts in each row, or their distance apart, although I am sure that no craft could have passed laterally between them. As for the length of each avenue, I could make a wild guess and say: "70-80 metres", but that could be very inaccurate."

Landing on Omaha

"The landing craft came in under the comforting thunder of the tremendous fire support from naval guns as well as tank and artillery pieces firing from the LCTs. Up to within a hundred yards of the seawater's edge there was every reason to hope that the German defences might have been neutralised. Thus, many of the landing craft began to come under fire from automatic weapons and artillery, which increased in volume as they approached touchdown. It was evident at H-Hour that the enemy fortifications had not been knocked out."

Undoubtedly many gun positions and strongpoints had survived the early fire, because rough seas, difficulties in observation in the smoke and dust, and with well-concealed emplacements, all made accurate fire difficult. In addition, and this greatly disappointed the leading assault troops, they discovered that the beach was relatively unscarred by the air bombardment. Overcast conditions had made things difficult for the Eighth Air Force Liberators, so, for safety reasons, the drop pattern had been pushed well inland. Nevertheless, some 446 aircraft were involved and over 13,000 bombs were dropped between 05.33 and 06.14hrs.

As on the other beaches the first wave, which landed just before 06.30hrs, was the Special Engineer Task Force and in certain sectors they suffered heavy casualties during the landing. However, despite this, and under intense fire, they continued their demolition work, so that they achieved six curvatures and three partial gaps through all the obstacle bands. Casualties among the Special Engineer Task Force, including naval personnel, were 4% on D-Day, most of whom were hit during the first half hour.
The infantry companies in the first wave came in by boat sections, six to a company, with an HQ section due in the next wave (07:00). Each LCVP carried an average of 31 men and an officer. The 160th's assault craft were loaded so that the first to land would be a section leader and five riflemen armed with M-1s (carbines) and carrying 96 rounds of ammunition. Following was a two-cutting team of four men, armed with rifles, two carried large "search-nose" cutters and two a smaller type. Behind these in the craft, loaded so that they landed in proper order were two BAR [ Browning Automatic Rifle] teams of four men each; two bazooka [anti-tank weapon] teams, totalling four men, the assistants armed with carbines; a mortar team of four men with a 60mm mortar and 15 to 20 rounds; a flame-thrower crew of two men; and, finally, five demolition men with pole and pack charges of TNT. A medic and an assistant section leader sat at the stern. Everybody wore assault jackets, with large pockets and built-in packs on the back; each man carried, in addition to personal weapons and special equipment, a gas mask, five grenades (the riflemen with the more cutters also had four smoke grenades), a half-rounded block of TNT with a primed fuse and six and one-third rations (three K's and three D's). All clothing was impregnated against gas. The men wore life preservers (two per man in the 13th Infantry units) and equipment and weapons were fastened to life preservers so that they could be floated in.

Few LCVPs and LCIs carrying assault troops were able to achieve a dry landing. Most grounded on sandbars 50-160m out and in some cases the water was neck deep. They were under fire from about a quarter of a mile out, beating the enemy fire being on the ramps of the LCVPs as they came in and then the hail of bullets whipping through the surf just in front of the lowered ramps. Small-arms fire, mortars and artillery were all concentrated on them, but it was the converging fire from enemy machine guns which caused the most casualties. Men dived under the water or were over the sides of the landing craft, in an effort to escape the bullets.

"Still, weakened from seaickness and often heavily loaded, the debarking troops had little chance of moving fast in the water that was knee deep or higher, and their progress was made more difficult by uneven footing in the runnels crossing the tidal flat. Many were exhausted before they reached shore, where they faced 200 yards or more of open sand to cross before reaching the cover at the sea wall or shingle bank. Troops who stopped to organise, rest, or take shelter behind obstacles or tanks merely prolonged their difficulties and suffered heavier losses.

It was a prime example of Rommel's oft-stated principle of the beach being the place to defeat the enemy and had this been repeated in all the other landing areas then Operation "Overlord" might have been all over before it had properly begun. In fact even on 'Bloody Omaha' there were areas where safer landings were possible. For example, several hundred metres of the low cliffs (just west of the Les Moulins gully were completely obscured in heavy smoke apparently started by naval shellfire and rockets. This smoke prevented the Germans from being able to see their targets. It was the same in other 'blind spots', but they were few and far between, and undoubtedly the first wave was in the main badly hit, men being drowned as well as being hit by enemy fire. The first wave was thus held at the water's edge and subsequent waves made slow and painful progress. Indeed the 352nd Infantry Division was so convinced it had won that it advised higher headquarters that the 'Allied assault had been hurled back into the sea, only at Colleville was fighting still under way, with the Germans counter-attacking'. This reassuring view was sent up to army group. But it was not entirely accurate, being based more on wishful thinking than hard fact.

An eyewitness Staff Sergeant Harley A. Reynolds of St. Petersburg, Florida, was then serving in Company B, 18th Infantry Regiment of 1st Infantry Division. He would later be awarded the Bronze Star, the French Médaille Militaire and Croix de Guerre and the Belgian Croix de Guerre, together with numerous other decorations, and was one of the first to hit the beach. As he recalled in a recording he made for the 1st US Infantry Division Museum at Cantigny:

'When the ramp went down we were in kneeling positions. Private Galenti, the radio man and I rose to exit first. As about the second or third step, I started to fall right. At this second Galenti was hit by what I believe was machine gun fire because there was more than one bullet. The radio was also hit and fragments flew from it. Galenti went down on the boat ramp. The fire seemed to come from our left front. I was maybe two feet ahead of him, saving me being hit by the same burst of fire. I don't recall getting my feet wet...

'I stayed to the right for a short distance. Looking for any covers, I headed for an obstacle made up of what appeared to be rails welded together. It reminded me of the Ball and Jacks we played as kids. The beach was very smooth here, showing the absence of shell holes we had been promised (to give the assault troops some cover from enemy fire). I knelt by the obstacle to look around. From the craft to this point my constant thoughts were 'What's keeping me up? I must be hit. What does it feel like when you get hit? Too many bullets flying not to be hit.' While crawling the beach I felt tags at my pants legs several times. Searching later I found two many rips and tears to identify as bullet holes. I think it is possible for bullets to pass close enough to tug at your clothing. Bullets coming so close made a hissing sound as they go by. Those you hear are not the ones that hits you...

'We reached the temporary shelter of the shingle and smugged in between others already there. As the tide came in others crept in to smuggle in with us. Our area of the beach seemed relatively safe, but only if you stayed prosn behind the shingle. Many times after bursts of machine gun fire or shells landing, I called out to Sergeant Rummell and Sergeant Handley, asking if they were OK and they said yes...

'Many times calls would sound out for company members. Efforts were being made to regroup without much success. One could just answer 'Here', stand up and walk over to the caller. You couldn't even roll over to the man alongside. This would put you too high and you were sure to get hit. You had to crouch backwards and side crouched like a crab with your head towards the roadbed. This didn't give you much protection and many men were hit while trying to shift along and regroup. Any movement seen about the roadbed would bring fire — rifle and machine guns. The tide was now almost lapping at our feet. Dead bodies were washing in and I'm thinking it's time to do something but what! Stickign your head up would draw fire. Occasional incoming artillery fire was
increasing. There obviously was no way backwards, only forward. I began to raise my head up and down for real quick looks ahead. I could see a narrow pond ahead with marsh grass. Between us and the pond was a wire strung on the roadbed and beyond it a three strand wire fence with a trip wire only on the front of it. There was a sign on the fence that was in German, but two words I did understand: “Achtung Minen!”

The enemy fire from the beach pillboxes and other defences had now begun to slacken off somewhat and Harley decided that if they made a short dash across to the pond they could get to the base of the sheltering hill to their front — but how to get through the wire and minefield? Fortunately, they then had help from a new arrival who pushed a 4m Bangalore torpedo under the wire on the roadbed. Harley recalled:

‘Exposing himself to enemy fire he inserted the fuzeighter, pulled the string to set it off, but it misfired. After a few seconds the man calmly crawled forward exposing himself again. He removed the bad lighter, replaced it with another and started to repeat his first moves. He turned his head in my direction, looked back, pulled the string and made only one or two movements backwards when he flinched. Death was so fast for him. His eyes seemed to have a questioning or pleading look in them. His head was maybe three feet from the explosion, but it didn’t damage him. No fire from the Germans for a couple of minutes before and if only a couple of seconds later, who knows. My head was three to four feet from the torpedo and I was closest to the path it blew in the wire. Within two or three seconds I was up and thru the wire. My men were behind me better than we have ever done in practice. I went thru the trip wire high stepping just as we did on the obstacle course. I was running so fast that I hadn’t made up my mind what to do about the wire fence until I faced it. I literally dove thru in a sideways dive. Hard to believe but I completely cleared those strands. Not one rip or tear in my clothes or skin. I was into the pond (on the other side of the wire) in under 10 seconds, with all my men except Schuetz and Galloway following (the former had been badly wounded on the beach and Galloway killed as he left the landing craft). Troops on the beach seemed to be holding back but not for long. They almost beat us to the top of the hill.’

Having made it off the beach Harley began to move inland, meeting up with some paratroopers — and a fearsome German Tiger tank but fortunately it had already knocked out by the paras. He closed his graphic narrative by explaining that:

“With no other US troops ahead of our team we were the first through the wire in our area, and the biggest contributing factor to the surrender of the entrenchments west of E-1. This entrenchment controlled the beach and gave us greatest number of casualties . . . I have felt for years this story should be told while it can be substantiated. We won’t live forever.”

Towards the middle of the morning the tide of battle began to change, large landing craft, despite the obstacles, forced their way to the beach and destroyers risked running aground in order to get closer and engage their targets more accurately. By last light, despite the fact that some 1,000 men had been killed and many more had been wounded on Omaha and that they had not achieved their initial objectives, they had, nevertheless, advanced off the beach and were now holding grimly on to the villages of Vierville-sur-Mer, St Laurent and Colleville-sur-Mer, which controlled the east-west road. The GIs were determined to resist all counter-attacks.

The Rangers at Pointe du Hoc
As already mentioned, the most dangerous of all the enemy coastal batteries, as far as the troops landing on Omaha and Utah Beaches were concerned, was the one at Pointe du Hoc, where six 155mm pieces of French origin were located, four guns in open emplacements and two casemated. Further construction work was under way. Their position was well defended from a seaward assault by sheer rocky cliffs some 30m high, below which there was a narrow strip of beach without any cover whatsoever. The Germans reckoned the position was impregnable from the seaward side, while it was mined and wired on the landward side, with its flanks protected by two machine gun nests and an anti-aircraft gun on its west. A total of some 210 men garrisoned the position — 125 infantry and 85 gunners, all from 716th Infantry Division. The task of capturing the gun position was given to a Ranger group, comprising two battalions (2nd and 5th) under the command of Lieutenant-Colonel James E. Rudder. The outline plan was that three companies (D, E and F) of the 2nd Battalion (Rudder's...
battalion) would land from the sea at H-Hour and assault the cliff position, while the main Ranger force (5th Battalion commanded by Lieutenant-Colonel Max F. Schneider, and Company A of the 1st Battalion) would wait off shore for a success signal, then land at the Pointe. The Ranger group would then move inland, cut the coastal road between Grandcamp and Vierville and arrive at the western end of Omaha Beach before pushing on westwards. It was believed that the support force by H-10, the larger Ranger force would land on the western end of Omaha Beach and proceed overland to Pointe du Hoc, avoiding all unnecessary objectives.

After the briefing, Tony Carter recalled, 'the ships were of course sealed and no one could communicate with the shore. Then came the delay caused by the bad weather and everyone taking part felt frustrated, having been keyed up for the operation after the long preparation. With all the Americans in the ship it was inevitable that poker games broke out everywhere. The one in the wardroom was continuous with players leaving and others joining on.'

"Some time on the 5th June, we weighed anchor and proceeded eastwards up Channel in a great company of ships and at a very slow pace... It must have been some time before dawn that we had to stand to. The LCAs were lowered to deck level, the Rangers embarked and the trek to the beach started. I seem to remember that we had about eight to 10 miles to cover and I had absorbed all possible information regarding tidal set, wind strength and anything else that could affect our course to the exact spot on the beach. Boats compasses were stowed and I was confident of finding the right place. But it was rough for an LCA. They are of wooden construction and armour plated. There is a small landing ramp in a square bow, behind which are steel, bullet-proof doors. The cow's stand in a small armoured turret on the starboard side forward and the boat has side decks covering the benches on which the troops sit. The stoker is in charge of the two 8-foot petrol engines and the cow's man passes orders to him via an engine room telegraph. The armour plate makes the boat heavy and a in a seaway with rough seas is ideal for the job. The American equivalent were not armoured, powered by very noisy diesel engines and presented a much higher profile, but they were better seagoats.

'It must have been about half way between the ship and shore that we had to reduce speed as the pumps were unable to cope with the water coming aboard. By this time many of the soldiers were just as cold as they got to shore, so they responded when I suggested that unless they took off their helmets and started hanging on the shore. Soon after that, conditions started to improve as we began to come under the law of the land.'

Fortunately all went well from then on and they reached the shore safely and dropped their load of Rangers, wishing them good luck — the lieutenant in charge of the troops telling Tony Carter that he really felt sorry for him having to go all the way back to the ship when he would be standing ashore on solid land. Then, about half a mile from shore on their way back to the Prins Leopold, they found themselves in the middle of a group of soldiers in the water whom they quickly pulled aboard.

'They were from an American landing craft that had been following us in, when someone had operated the landing ramp accidentally. At full speed the boat immediately filled and sank. So we returned to the beach, where an LCA was just landing troops. To avoid the delay of beaching again, I decided to put the soldiers aboard the LCA. They made the short journey, but just as we were about to pull away again, I noticed that the LCA was carrying a deck cargo of petrol in jerricans and at the same moment the petrol started to leak from a midget shell. For a moment the whole boat was enveloped in flames, but we managed to pull clear without casualties.'

Tony Carter's LCA got back to the Prins Leopold safely that time, but a couple of months later the ship hit a mine halfway across the Channel and sank. Fortunately they were sailing in a convoy so the majority of the crew and passengers were rescued.

'In fact she was under tow by a tug when she finally went down. I had never realised that seeing your ship go down was like losing a close friend.'

Meanwhile, there had been some errors of direction among Colonel Radnor's column of LCAs, but these problems were overcome and they reached their objective safely but rather than planned. The supporting naval fire had stopped before H-Hour, so the German garrison on Pointe du Hoc had had some 40 minutes to recover.

'As the LCAs neared the Point, they received scattered small arms and automatic fire, and enemy troops could be observed moving near the edge of the cliff. There was, however, no indication of artillery in action from the enemy positions. At 07.10 the first craft were grounding under the cliffs, radio silence was broken to send Colonel Schneider the order for landing at Vierville. The message was acknowledged. The small assault force was not entirely alone as it came onto a boat into shore. The British destroyer Talybont which had taken part in the early bombardment of Pointe du Hoc at a range of 2.7 miles, saw the hostile heading off on the wrong course and round it difficult to understand as "Texas" [as US battleship] fall of shot on Pointe du Hoc was obvious." As the Rangers corrected course and came under fire from the cliff positions, the Talybont closed range and for 15 minutes [06.45-07.00] raked enemy fire positions with 4in and 2-pounder shells. Meanwhile, the US destroyer Satterlee, 2,500yd from Pointe du Hoc, could see enemy troops assembling on the cliffs and opened fire with main battery and machine gun fire.

'The Cliff Assault. The nine LCAs touched down on a front of about 300 yards, and found it difficult under the tip of Pointe du Hoc, and the others spaced fairly evenly. No great distance separated some of the boat teams, but according to plan, they went into action as separate units, each facing its particular problems of escape and opposition. In certain general respects, their

Below: Pointe du Hoc as it is today, looking landward. Simon Forty
and they scrambled up to the top and then followed Roberts’ party towards the same objective.

LCA862 This craft landed about 100m left of the flank. LCA and despite losing four men killed and wounded crossing the beach, the team managed to get some of their ropes up the cliffs and were soon at the top and away on their mission.

LCA888 This was Colonel Butler’s craft. It was the first to hit the beach and the 21 occupants saw and engaged enemy troops on the cliff edge, as they crossed the beach the 21 occupants saw and engaged enemy troops on the cliff edge, as they crossed the beach the 21 occupants saw and engaged enemy troops on the cliff edge, as they crossed the beach. The Rangers had studied these few acres for months, seeing excellent photographs and large-scale maps that showed every slight feature of terrain and fortifications. Now they found themselves in danger of losing their way as soon as they made a few steps from the ragged cliff edge into the chaos of holes and debris.

The Rangers had a set way of doing things which at first sight appeared to be chaotic, because each small group worked to its own agenda, moving independently as soon as it was complete. Thus over a period of some 15–30 minutes a series of these small groups had left the cliff edge, fanning out in all directions. As it was impossible to trace their movements in an exact order or timing, then it must have been extremely difficult, if not impossible, for the Germans to spot some of the scaling equipment, the enemy fire — which had not been as bad as expected — and the badly crated foreshore. Now they had to carry out their raison d’être and capture the position. The force, now of some 150 men (allowing for casualties, IQ and mortar personnel), found themselves in a:

‘boulevard of casualties, a large area torn to pieces by bombs and heavy naval shells. Expected landmarks were gone; craters and mounds of wreckage were everywhere, obscuring remnants of paths and trenches. The Rangers had studied these few acres for months, seeing excellent photographs and large-scale maps that showed every slight feature of terrain and fortifications. Now they found themselves in danger of losing their way as soon as they made a few steps from the ragged cliff edge into the chaos of holes and debris.’

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‘The outcome was an action without a clear pattern in detail, but with very clearly defined results.’ Here, for example, is an account of the way in which the men from LCA861 dealt with the main OP:

‘The first men up from LCA861 found themselves about 20 feet to seaward of the massive and undamaged concrete OP. As Slgtn Denbo and Pte Roberts crawled five feet towards a trench, small-arms fire, including machine guns, started up from the slits of the OP. The Rangers threw four grenades at the slits and three went in. The Ranger gunners were overrun by the Germans.’

Below: German teenagers board their aircraft on the night of 5/6 June for operations such as the assault on the Marville Battery. They and their American counterparts would be the first Allied troops to land in France. (W.W. — ON1303)

Bottom: Part of the Marville Battery as it is today. The command post and underground HQ on the right are now a museum, whilst one of the gun casemates can be seen to the left. Author’s collection

machine gun stopped firing, but Doocey was wounded by a rifle bullet. Lieutenant Lagree, Sergeant Yardley, Pte Ball and Tech Sergeant Gunther joined up in the trench. Yardley had a bazooka and his first round hit the edge of the firing slit; the second went through. Taking advantage of this, the group left Yardley to watch the embasure and dashed around the OP without drawing enemy fire. On the other side of the structure they found Corporal Aguzzi watching the main entrance from the landward side. Lagree’s party pushed on towards gun position No 4 and points inland.

Aguzzi had come up from LCA862 southwest of the OP, with Lieutenant Loogman and Sergeant Cleaves. As they started away from the edge, joined by Tech S Thompson and Pte Ballou, they saw a German close to the OP, throwing grenades over the cliff from the shelter of a trench. The OP was not their job, but the party decided to go after the grenade thrower. Ballou crossed over to No 3 gun position to cover the advance of the party. They threw grenades at the German and moved into the trench when he ducked under the entrance to the OP. Aguzzi found a shell hole from which he could watch the main entrance, while three Rangers tried to skirt the OP on the east and get it from the rear. Cleaves was wounded by a
mine — the only casualty from this came during the day. Thompson got close enough to hear a radio working inside the OP, looked for the aerial on the roof and shot it. The German was killed and fell dead across the entrance. Lieutenant Leagon and Thompson decided to let the OP stand for demolition and went off on their original mission for fire-spotting. Asstirty, standing to watch the entrance, was surprised by the appearance of Lieutant Lepers' party, coming from the rear of the OP. Two small groups of Rattlers had attacked the D-F from opposite sides, neither aware of the other's presence."

When Rudder's men reached the gun positions, they found that the guns had been removed, so he divided his small command into two groups and set them up in a defensive position while the other went off to look for the guns. Luckily they found them without difficulty, hidden in an orchard behind the position, where they had been taken for repairs following the heavy air raids. Well camouflaged but unguarded, they were destroyed by the Rattlers using thermite grenades. Later the Germans (1st Battalion of 91st Infantry Regiment) put in a series of heavy counter-attacks, which caused many casualties and forced the Americans back into a small enclave on the cliffs, just 200yd wide. Nevertheless, thanks to supporting naval gunfire, they managed to hang on and during the following night the enemy withdrew. The Rattlers were relieved by tanks and infantry from 116th Infantry Regiment and the 5th Rangers. Out of the force of 225 which had landed at Poine du Hoc, some 135 had been killed, wounded or were missing in action — a very high casualty rate, but in the circumstances considered as justified in view of the importance of the target.

The Merville Battery

The Merville Battery, where the British and Canadians would land, there were also equally important artillery batteries which could seriously threaten the Allied landings. One such battery was at Merville, where it was thought there were four 15cm guns, which would easily be able to reach the Sword, Juno and Gold beaches, especially Sword, with devastating results. The battery was located too far inland to be taken out by commandos, so it was decided to attack it using airborne troops before any landings took place. The area around the battery position had already been cleared of civilians by the Germans, who now used the nearby villages of Groisenville and Frasneville Plage as troop bases. The battery had been the subject of RAF bomber raids in the weeks leading up to D-Day but aerial photographs had shown that the casemates were still virtually undamaged. It was decided that the assault on the Merville Battery position would be undertaken by men of the 9th Parachute Battalion, under Lieutenant Colonel Terence Orway.

A fair amount of information had been obtained from aerial photographs and ground intelligence and a full scale model built on which the paratroopers trained endlessly. The gun positions were formidable, being built on some 4m of concrete lullier and surrounded by 2m thick concrete walls, banked with another 4m of earth. Steel doors covered by machine guns and 28mm guns protected every entrance, while there was a 100lb mine on a timer and 5cm of thick barbed-wire surrounding the battery position. The approaches, especially from the seaward side, had also been mined and there were random machine gun posts and anti-tank ditches. The Garrisons was estimated at some 200-plus troops. This then was to be the 9th Battalion's task — a formidable one.

The plan was for the battalion to be divided into two groups. The smaller group, the advance party, would land first, prepare the RV for the main body, reconnoiter the battery position and provide covering fire for the rest of the main body to carry out the main assault. A bombing raid by 100 Lancasters had been fixed for 03.00hrs, so it would be essential to know what damage had been done before the main attack began. An integral part of the main body was a party of sappers, with the necessary explosives and equipment to blow up the guns. There were five gliders packed with anti-tank guns, jeeps, scaling ladders, Bangalore torpedoes and other kit, whilst three other gliders, carrying 50 8in howitzers and 150 rifles were a coup de main force that would land directly on top of the gun positions, then leap out of their gliders and attack from within, whilst the rest of the battalion stormed their way through the perimeter to join them. The advance group would jump at 02.00hrs, the main body an hour after that. Everything was meticulously planned, but unfortunately the weather played havoc with these arrangements even before the Germans took a hand. High winds scattered the aircraft and the battalion landed all over the place. For example, three gliders scheduled to crash-land on top of the battery never made it — one became separated from its towing aircraft and had to ditch early; the second was blown off course by the winds and landed in an orchard some 50yd outside the perimeter; the third glider was released too early and came down in a nearby village. And the main body was no more fortunate.

"We took off just after midnight," recalled paratrooper Les Carterwright.

"and we dropped just in front of us. It was a beautiful flight until we hit the coast and you've never seen anything like it in your life. It was just like going into a firework display and the old duck was going fireworks and once and everybody was saying 'Let's get out of this so-and-so thing'. Anyway eventually the Pilot says 'Go!' and puts the light on and off on our way we go. And as I dropped, one of my little glider.login started coming down and I hit the deck and out of my chute, got my Steen out, everything going, look round — couldn't see anything. But there was something that got implanted in my mind — we must go to the RV. And the Colonel's orders were 'We're not going to private light fights. You go to the RV and THAT IS IT.'"

Les could just see a red Alfa lamp twinkling in the distance and decided he would make for it. Fortunately it was one of the battalion officers up a tree, shining the light in circles to bring in the stragglers.

"As soon as I saw that I knew where I was to get to. I could see the tree across the fields and I saw a bird not in front of where I knew the RV was and I yelled the password out and he yelled it back and I looked at him and it was the Colonel. . . He tapped me on the shoulder and said, "Well done lad. What company?" "C Company." "Down there." "I went down there and . . . dropped beside my lieutenant (Jackson) and had a little word with him, you know. . . . It wasn't until years later that I found out that of the 500 who jumped in our battalion, only 150 got to the rendezvous."

Orway's force was still only 150 strong when H-Hour (02:50hrs) arrived and he had to make the difficult decision whether to use this or not. 6-pounder anti-tank guns, no jeeps or trailers, no sappers, no mine-clearing equipment, no mortars and just one Vickers medium machine gun. There were also no rangers to clear the breaches and hit the batteries. The 60-man advance party and they were without the field ambulance section and naval bombardment forward observation party. Despite all this the battery had been hit by the 8in howitzers during the morning of 6 June, owing to the postponement of D-Day. After a two hour wait the battery was heavily shelled by the time the German's break out. An hour before the actual crossing most of us were ecstatic and that didn't do much for my morale! It also accounted for my lack of concern when I inadvertently stood on my escape apparatus and bust the valve! That grey dawn was not brightened by the news that the D-Day tanks would not be launched. However, it was discovered that the Merville battery had felt our chances of being hit on the run-in were much higher when still in the LCT."

"As the sun came up we clearing sight met our eyes. The sea was full of ships as far as we could see, of all shapes and sizes and very temptingly blind. There was a certain amount of waiting to do and it was a matter of judgement for the troop leader deciding to drop the screen. The time was 07.30am and the only thing on our minds was the order to move on to take the Merville battery, but the screen was still up. To traverse the tangle of the screen had to be done and I got the order to get off the beach and get on the next available. They had the screen all set up on the other side of the tank. I moved rather sharply to pull the screen down and remounted."
The tide was still out and all the beach obstacles, ramps and trenches were exposed to view. All we had to do was to weave about in between them. We followed a minesweeping PT, which had been driven ashore by the approaching German warships from the boats. Once on the PT we could see what we were going into. Landing craft were being unloaded, bodies of German soldiers were on the beach in positions that, as we went to find out, only death could produce. The landing craft slowed down, the sailors were in their scuttling boxes, the heavy barbed-wire ramp was down and it was every man for himself. As we stumbled down the ramps, sporadic machine gun fire came from the right and we went waist deep in water. Every man was wearing Field Service Marching Order, but it was amazing how fast you could travel through water when you have a good reason. It was nothing like the controlled exercise landings at Staddil... A group to our right went out after a pilothouse, a tank with a Petzl mantor had just dealt with another strongpoint and I remember thinking: ‘Never think you are safe behind a fort of concrete. It is far safer in a slit trench. Pill boxes only delay, they are always destroyed sooner or later, along with the occupants.’

“We did get shelled badly, although the soft sand stood us in good stead. We also got strafed and on one occasion a bomb hit a Riffin gun. It was only a question of time. The beach was now under heavy fire from strongpoints in Le Hamel.’

By the end of D-Day there were seven successful breaching lanes through the obstacles, wire and minefields on the two British beaches, out of the fifteen which had been planned. Some 59 Sherman Crab had been in action, 12 of which had been destroyed whilst many others had been damaged. They were therefore reduced to 290mm Pratigny mortars which had been dropped with many seemingly impenetrable enemy blockhouses, even though they had a range of only 800. Eight lascius and 10 SIBs (Small Box Girder) bridges had been dropped to make crossings over anti-tank ditches. Armoured buldoggers, Butte and Sherman tank recovery vehicles had all come into their own. Without doubt General Holker’s ‘Funnies’ had proved themselves invaluable, the success on the British beaches being due in no small way to them. In contrast, the Americans, who had DD tanks but no specialised armament, made much slower headway and had far more casualties.

Clearing the Beach

Right from the start beach troops came the Beach Groups, whose job it was to clear any enemy left on the beach, secure the beach in question so as to enable the follow-up troops to pass through the beach safely and follow the assaulting troops. All members of the Beach Groups had a broad white band painted on their steel helmets to indicate that they were the only troops allowed to remain on the beaches. Peter Lovett of Swanscombe was a member of such a group attached to the 3rd Canadian Infantry Division, who landed on Juno Beach. He told me:

“As we approached the Normandy shore we were ordered up on deck and crched in lines on each side of the deck round the bows and in the back ramps. Once on the deck we could see what we were going into. Landing craft were being unloaded, bodies of German soldiers were on the beach in positions that, as we went to find out, only death could produce. The landing craft slowed down, the sailors were in their scuttling boxes, the landing craft was moved on and it was every man for himself. As we stumbled down the ramps, sporadic machine gun fire came from the right and we went waist deep in water. Every man was wearing Field Service Marching Order, but it was amazing how fast you could travel through water when you have a good reason. It was nothing like the controlled exercise landings at Staddil... A group to our right went out after a pilothouse, a tank with a Petzl mantor had just dealt with another strongpoint and I remember thinking: ‘Never think you are safe behind a fort of concrete. It is far safer in a slit trench. Pill boxes only delay, they are always destroyed sooner or later, along with the occupants.’

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The landing craft, the railway line and the beaches were now under intense fire from strongpoints in Le Hamel.’

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Chapter 10
Dealing with the Fortresses

The Toughest Nuts to Crack

Of all the various components part of the Atlantic Wall defences undoubtedly the designated fortresses (Festungen) were the toughest nuts to crack. Therefore it was eminently sensible for the Allies only to take them on when it was essential to the overall plan of winning the war in North-West Europe. It will be remembered that the Commander-in-Chief West had, with the Führer’s full approval and backing, designated some of the fortress areas as early as 8 July 1942. These had included St Malo, Cherbourg, Le Havre, Boulogne, Calais and Dunkerque along the French Channel coast; Brest, Lorient, St Nazaire, La Rochelle and Royan along France’s Atlantic coast; and, Den Helder, Ijmuiden, Hoek van Holland and Vlissingen in the Netherlands. As we have seen, others, including the Channel Islands, were added later. The primary aim of the garrisons of these fortresses was to deny major ports to the Allies, and Hitler became personally involved in planning their defences, selecting and appointing their commanders and doing his utmost — albeit at long range — to ensure that they fought to the death. The appointed fortress commander had a direct line to Hitler’s headquarters so that his Führer could, when necessary, keep in personal touch, while every one of the chosen commanders had to swear a personal oath of allegiance. This was enshrined in Führer Order 13 of March 1944, which has already been covered in Chapter 2. Suffice it here to reiterate the stipulation from Hitler that these fortress commanders must be tough, experienced soldiers, of general rank, and not be allowed to delegate their responsibilities to anyone else.

Each of the selected fortress commanders fought his particular battle differently and naturally had to fight it at different times between D-Day and the end of hostilities. First to have to face the onslaught was the port of Cherbourg on the Cotentin peninsula, then St Malo and Brest to its west in Brittany. These would be followed by Lorient and St Nazaire. Elements of the US First and Third Armies swung in that direction following the Operation ‘Cobra’ breakout, while, on the other flank, the Canadian First and British Second Armies began advancing up the Channel coast, from Le Havre onwards, taking on each of the remaining German strongpoints. They had mixed results, because the Allied advance was not always crowned with the successful capture of the requisite port. For example, they had an early setback at Dunkerque while the spectacular early capture of the early port on Antwerp had to wait for Vlissingen and all the rest of Walcheren to be cleared of the enemy before the vital Scheldt estuary could be opened to shipping once again.

The Mulberry Harbours

The major task of most of the fortresses was to prevent the Allies from capturing a major port, because of course German did not know about the two amazing prefabricated Mulberry Harbours, which were to be towed over to the Normandy beaches soon after D-Day, the prefabricated concrete caissons then being sunk to form two harbours — they had taken almost all the UK concrete production to make. Then 39 old warships and merchantmen, known as the ‘Cormor

Fleet’ which had sailed down from Scotland to Poole harbour prior to D-Day, ready for their final journey over to Normandy, arrived and were sunk to form breakwaters. The two Mulberrys were meant to be up and running as soon as possible during the first week after the landing, but took rather longer than anticipated. Then, just as they were being got ready to operate, severe gales (the worst for 80 years) blew up early in the morning of 19 June and blew for three nights and three days without respite. Mulberry A (off Omaha Beach) was irreparably damaged, while Mulberry B (off Arromanches) was severely damaged. The two had been expected to handle some 15,000 tons of cargo daily, rising to 46,000 tons by D+90, so the damage was very worrying and put pressure on the ground forces to capture a port as quickly as possible. Eventually, however, enough was salvaged from the two artificial harbours to restore Mulberry B and to get it working again. Another revolutionary means of supply was PLUTO — The Pipeline Under The Ocean — which enabled fuel to be pumped from England to France.

A Selection of Battles for Fortresses

It would take another book of comparable size to this one to cover all the battles which took place in isolating and capturing these fortresses, so all I have space for are just some examples. I have therefore tried to choose four which had very different characteristics:

• The capture of Cherbourg.
• The isolation and final surrender of Dunkerque.
• The clearing of the Scheldt estuary.
• The liberation of the Channel Islands.

The Capture of Cherbourg

Fortress Commander Cherbourg

The Commander of ‘Fortress Cherbourg’ was 49-year-old Generalleutnant Karl-Wilhelm von Schlieben, holder of both the German Cross in Gold and the Knight’s Cross, who was at the time commanding the 709th Infantry Division, the Cherbourg city garrison, which had been in Brittany since the spring of 1943. It would be to his him that the Führer would send a signal on 23 June, ordering him to ‘defend the city to the last man and the last bullet’. Within the Cotentin peninsula there were other static divisions, elements of which had also fallen back onto Cherbourg and were now under von Schlieben’s command. There was also a significant number of Kriegsmarine personnel in the port, including two Marine Artillery regiments, with seven casemate batteries, all sited to defend against a seaborne assault, but each still a self-contained small fortress needing to be taken out, and three Marine Flak Battalons (803, 804 and 805). Also located at Cherbourg was the headquarters of the German Naval Commander Normandy, Vizeadmiral Walter Hennecke.

In addition, Cherbourg had been an important German naval base, for various Flotillas of E-boats (Schnellboote). For example, in 1943 there were the 5th and 6th Flotillas, but later just the 5th for a while and then joined by the 9th. They and other Flotillas from Boulogne and Ostend often used the Channel Islands as a temporary base while operating against enemy shipping. Probably their most successful operation had been on the night of 27/28 April 1944 when six E-boats of the 5th Flotilla and three of the 9th sailed from Cherbourg and in Lyme Bay unexpectedly found themselves involved in Exercise Tiger (part of the preparations for D-Day in which landings were being practiced on Slapton Sands). The E-boats attacked a convoy in the bay, sinking two heavily laden LSTs and badly damaging a third. Allied losses were heavy — 441 soldiers and 197 sailors — more than would be killed on D-Day on Utah Beach.

The Attackers

General ‘Lightning’ Joe Collins’ US VII Corps was given the task of taking Cherbourg. He had advanced from Utah Beach on a three-division front (from east to west 4th, 79th and 8th Infantry Divisions), moving through Montebourg, Vologne and Briquebec. The major effort would be in the form of a double-pronged assault by the 4th and 9th Divisions, cutting in against
the Cherbourg defenses from east and west, with the 79th Division and the 4th Cavalry Squadron, serving as a link between the two prongs. The attack began well before first light on 19 June, without an necessary artillery barrage to warn the enemy. However, the Germans had strengthened their positions prior to the attack and the Division made little progress until after last light, when 8th Infantry Regiment carried out a well-executed double envelopment of Montebourg, supported by 116th Infantry Regiment. By midnight, both regiments were closing in on Valognes. The enemy then abandoned Valognes and fell back within the outer defense ring around Cherbourg. They were speedily followed up by the Americans and by 21 June, the 8th and 22nd US Infantry Regiments had begun to make inroads into the German perimeter. Similarly, the 79th Division was pushing hard and meeting only light initial resistance. The attack continued into the night and forced the enemy to withdraw to the north. The 79th uncovered a major V-bomb launching site near Brix, to the north-west of Valognes — this was one of several such sites which the corps overran on the Cotentin peninsula. The 9th Infantry Division made steady progress and by 07.00 the following morning the old fortress town of Bréguébec, which it had been anticipated would be a hard place to take, had been overrun without hardly a shot being fired. By the late afternoon 9th Division, with the 4th Cavalry Squadron on its right, had reached the line Helfville-Collerville-S. Martin.

Storms in the Channel

'The need for early capture of the port city was dramatized by a four-day storm that hit the Normandy beaches beginning June 19. By 21st the ships and barges sank or beached off-shore to form artificial harbors begun to break up, and unloading of troops and other supplies had to be suspended. Combat operations ceased as well as the landing of additional troops would be greatly threatened if capture of the port facilities was long delayed.'

That was how General Collins summarized the situation which faced the Allies as the final assault on Cherbourg began. However, before the assault began on the 22nd, saturation bombing of the German perimeter defensive positions took place, as a prelude, designed to weaken the already shell-shocked defenders. For well over 60 minutes before 16:00 wave upon wave of American fighter-bombers plastered all the main enemy positions and this was followed by artillery and also by naval gunfire. 16:00 for the final assault was set for 14:00 on the 22nd. The evening before, a multilingual appeal had been made to urge the Cherbourg garrison to surrender by 09.00hrs, but no answer was received, so the attack went ahead as planned.

Naval Support

As the final reduction of the fortress began, it was accompanied by a synchronised naval bombardment. A task force (TF 129) had been assembled to provide the bombardment. This consisted of three US battleships (Texas, Arkansas and Nevada), four cruisers, two US and two British (Tucadoua, Quincy, Glazeine and Enterprise), with screening destroyers and two minesweeping flotillas, under the command of Rear-Admiral M. L. Drey, USN. What the Army had requested was that the task force should close in to the coast to neutralise the very powerful shore batteries and deliver heavy fire against artillery and protected German pockets of resistance, so as to destroy their resistance, whilst the VII Corps left the high ground south of the city and stormed the inner defenses.

Despite the American air and naval bombardment, the garrison did not cave in, clinging tenaciously to their positions, buoyed up, perhaps, not so much by the hope of being relieved, but rather by the Führer's exhortations to defend every last bunker and to leave the enemy 'not a harbour but a field of ruins'. There was no clear breakthrough on the 22nd and progress was painfully slow. It would not be until the 25th that the brave garrison started to crack. Here is how 'Lightning Joe' described the situation in a letter to his wife:

'Yesterday was one of our great days. The evening before we had ringed around the city and I was confident that we would be able to enter Cherbourg proper sometime on Sunday... Right after lunch I started my usual round visiting the divisions... in an armored car and that was my rolling CP... First we went to see Tubby Barton's division. Taddy Roosevelt acted as our guide and led us to a captured German position overlooking the city from the east... The view of Cherbourg from this point is magnificent. Off to the left were the steep cliffs of the headlands that run right up to the back door of the city. Another of our divisions was rapidly closing in on this area from the south and we could see smoke from the fires being directed into Fort du Roulé, which is the central bastion of the German defenses, on a high bluff overlooking the city. Over to the right were the inner and outer breakwaters with the old French forts guarding the entrance from the sea. Beyond the haze of smoke we could see part of our battle fleet engaged in shelling the seaward batteries west of the town. Within this frame, the city itself lay as a hold from which billows of smoke powered up in the places where the Germans were destroying stores of oil and ammunition. As we watched, one of our heavy batteries fired a perfect concentration onto a German position just west of the Fort des Flambards. It was a thrilling and in a sense, an awe-inspiring sight. I knew definitely that Cherbourg was ours and directed Tubby to push one of his regiments into the eastern section of the city before that night'.

General Collins then continued to describe his progress around the city visiting other positions, getting more spectacular views, then giving the other two divisional commanders orders and, at one stage, having to dodge the fire of an enemy 8.8cm gun as he made his way to the safety of a well-placed concrete OP, from which he could direct fire onto the troublesome 88 and silence it. His account of the day closed with the words:

'I directed Matt [General Montoon Eddy, commander 9th Infantry Division] to push his two regiments into the city and before dark one of them had broken through to the sea, effectively cutting the last route of withdrawal of the Germans to the area they still hold in the Cap de la Hague to the north-west.'

General von Schlieben and Admiral Hennecke were both taken prisoner at Hennecke's headquarters during the afternoon of the 26th and — despite having previously excused a 'no surrender pledge' from their men — gave themselves up to the commander of the American assaulting forces. The city arseled held out until the following morning, while forces outside Cherbourg...
and in the north-west of the peninsula continued to resist until 1 July when they were rounded up by the US 9th Infantry Division. This action really brought to a close Operation "Neptune," which had begun with D-Day, now that the naval position had been stabilised in the assault area and the city port of Cherbourg had been liberated.

Some 39,000 prisoners were taken in Cherbourg and work immediately began to reopen the port for Allied use.

Isolating Dunkerque

As the Allies advanced, the Canadian II Corps operated in the coastal belt of Seventh Army Group. General Montgomery's intention was for it to clear the area west of Antwerp up to the southern shores of the Scheldt estuary. At the same time, however, the garrisons of Boulogne and Calais, while investing Dunkerque. This was the toughest nut of the three, being a major German naval base as well as a fortress. Some 30,000 to 40,000 German troops were estimated to be holding Boulogne, Calais and Dunkerque. While operations for the clearing of the Scheldt were developing, Boulogne and Calais were both stormed. The assault on the former began on 17 September, the latter on 25 September, Boulogne surrendered on 22 September and Calais on 30 September, after fighting for both fortresses. It was then decided that the Canadians should concentrate on clearing the Scheldt, so Dunkerque, which continued to be invested, became an army group responsibility and Montgomery put the Czechoslovakian Independent Armoured Brigade in charge of the investing forces surrounding the port. Part of its force was the British 7th Royal Tank Regiment, commanded by Lieutenant-Colonel (later Major-General) Rea Leakey, who would be awarded the Czechoslovak Military Cross for his part in the siege. In his autobiography General Leakey had this to say about his part in the battle:

"What a grand crew these Czechs were, the more we saw of them, the more we liked them, particularly Major-General Alois Libkha. When I met him he told me, most apologetically, that my Regiment was to take over the most difficult sector because, after all, we were a regular Regiment. I later learned that in their eyes, this was a great honour! I then visited the 1st Battalion the Black Watch from whom I was to take over. They were holding some 6,000 yards of front to the south of Dunkirk and guarded the direct route to Calais. The CO, Lieutenant-Colonel John Hopwood, greeted me with joy. "Thank goodness for the few tanks in this area; we need them as things are a bit hot round here. Last night the Germans were throwing hand grenades at me here at my headquarters. Not so funny, as we are at least two miles behind the front line. Who are your infantry?" I then explained that my Regiment was to relieve them and that we were the infantry. He just roared with laughter and explained that his Battalion, up to full strength and augmented by two dismounted anti-aircraft batteries, was finding very great difficulties in holding the line.

"How can you keep them?" He asked. "I would have to leave some men guarding our Churchill tanks, so at the most 400 officers and men would be available to man the defensive positions. And I explained that few would be armed with rifles and that we had a few Bren guns, but of course no support weapons. He told me he had been well over double that figure. "If you are still holding the line in a fortnight's time, send me a signal and you will receive a crate of whisky — and I would remind you that I am a Scotman."

More from Rea Leakey later, but first a brief look at their opposition. The garrison was some 12,000 men, from all three services of the Wehrmacht, the Luftwaffe representatives initially being the strongest, namely the 18th Luftwaffe Field Division, whose commander, Generalleutnant Joachim von Treschkow, was a good friend of the Stavka. However, he and his division left Dunkerque on 14 August to fight in the Senne area. Nevertheless, the rest of the garrison remained determined to resist. They included Kriegsmarine Artillerie 618, plus an artillery group and a flak group. As well as occupying the port and docks, they were also located in a string of strongpoints some distance outside, stretching from Louv-Plage and Marlyck on the coast west of Dunkerque, to Bergues some 8km inland and thence to Bray-Dunes some 8km up the coast. The town itself was not strongly defended. Dunkerque had been flooded, making movement off the roads and tracks well nigh impossible. The Canadians had tried valiantly to break in but, through the German defences, but without much success. Throughout the entire siege, the Germans fought ferociously and were never surrendering, despite their impossible situation. At one stage the French Red Cross asked for a truck so as to evacuate some 8,000 civilians, and this was granted and landed beside the old station.

Finally, after some difficult, dangerous and extremely unpleasant (due to the conditions) offensive actions had failed to break through the German defences, it was decided that at least a two-division attack, heavily supported with artillery bombardment, bombing and naval gunfire, would be needed to achieve any significant results. This rightly seemed to Montgomery to be a waste of time and effort, especially as it was far more important to clear the Scheldt, so that much larger part of Antwerp could be opened up. So on 17 September General Henry Czurrac, commander of the First Canadian Army, ordered to call off the assaults and to hand over responsibility for continuing the investment of the fortress to a mixture of forces including, as we have already seen, the Czech armoured brigade. So now back to Rea Leakey:

"So we dumped our tanks in a small town called Gravelines, and on a dark September night took over from the Black Watch. We knew we were going to be employed in an ugly business, and on top of that it was necessary to have one of the squadrons out of the line in reserve. As a result, where the Black Watch had a platoon defence post, our men had it in no more than 10. Our sector was flat, mostly waterlogged and the only cover was one small village and a few farmhouses. Two roads led to the town of Dunkirk and there was also a short road leading from the small village directly to the seashore. Vehicles could not move across country. By day we saw few Germans. They had plenty of artillery, but not a lot of ammunition. By night, however, they were very present.

"I remember the night we took over; the Black Watch put on a firework display, the like of which I had not seen before. It was a mixture of weapons and plenty of ammunition. As a result the Germans left us alone and the handover was completed by midnight. From then on there was no doubt the enemy was anxious to know what was going on. It did not take them long to find out. Our first night was peaceful, although various positions were shelled and German patrols were active. On the second night one of our posts fled by a drowsy night porter. Two men escaped, but the rest were killed or captured. The next night the same happened to another post. And this was to be the pattern of operations. Following two nights. On the sixth night the strongest and most important of our positions astride the road leading to Calais, manned by 23 men, was attacked by a force of nearly 500 men (so we discovered later) and this time none of our men escaped. At dawn we found our casualties took the position and were holding it in strength.

"The situation was serious, because we now had little to stop the Germans pushing onto Gravelines and even to Calais, near one of the most important posts in their hands. By midday I had assembled a company of about 100 men armed with a variety of weapons, and 10 Churchill tanks. So the area surrounding Dunkerque had been flooded, making movement off the roads and tracks well nigh impossible. The Canadians had tried valiantly to break in but, through the German defences, but without success. Throughout the entire siege, the Germans fought ferociously and were never surrendering, despite their impossible situation. At one stage the French Red Cross asked for a truck so as to evacuate some 8,000 civilians, and this was granted and landed beside the old station.

"Before long the Germans were at us again and night after night our isolated posts were attacked. It was now becoming bitterly cold and most nights the temperature fell to below freezing point and when in their waterlogged pits was also beginning to drop, and I realised that this state of affairs could not go on. Scraping the map, I formulated my plan. We were running across our front some 2,000 yards plus beyond of our positions. There were two "feeder" tracks leading up to this road from our area. This gave me an idea. If we could attack and capture this lateral road not only would we narrow our front, but it would also be retraceable for our tanks, because they could use it to move across the front. I arranged for as many tanks as possible to be fitted with a spotlight.

"Once again I called in all the men from the forward posts and this time formed two teams; each consisted of 10 tanks and about 50 men. With this small force I launched an attack against the German position. Each team was based on one of the two feeder tracks leading up to the lateral road; the tanks were of course, roadbound, but as the country was flat and open, they could cope quite well. The plan was to move by a considerable distance. We caught the Germans "napping" and within two hours we had reached the lateral road and continued to push forward. By this time we had captured quite a number of prisoners, and they were becoming a bit of an embarrassment; when we asked Brigade to come and collect them, they quite naturally asked how we had collected them. I had forgotten to tell General Libkha about the attack! He was just a little annoyed. However, later on he awarded me the Czechoslovak Military Cross, so to must have forgiven me.

"As darkness closed in as we fell back to the lateral road, more tanks were brought forward and we took up our future defensive positions that were to last until German surrender. No longer did the men occupy damp holes in the grounds; the tanks, fully manned, were spaced across the front on the lateral road and acted as pillboxes, each equipped with a spotlight. At dawn, the tanks moved back down the feeder roads and spent the day hidden around farmyards. The crescent slept at dusk they moved forward again and took up station on the lateral road. It was certainly a novel way of holding a front, my poor tank officers were most sceptical. Brigadier "Wahno" paid us a visit shortly after we had adopted these tactics and, to give him his due, he refrained from criticism. He evidently decided to wait and see.

"The Germans soon realised our game and tried every means possible to make us abandon it. Almost every night aircraft from Germany used to drop supplies to the beleaguered garrison. Our officers were most sceptical. Brigadier "Wahno" paid us a visit shortly after we had adopted these tactics and, to give him his due, he refrained from criticism. He evidently decided to wait and see.

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Above: The stubborn garrison in the fortress of Dunkerque was kept bottled up by the Czech Independent Armoured Brigade who had relieved the Canadians. Here a brigade patrol of engineers crosses one of the flooded areas around the town. WM - B15732

Above: As Rea Leakey explains, there were also French troops attached to his regiment, helping to encircle Dunkerque. Here two of them use a captured MG42 machine gun — probably the best LMG of the war, with a very high rate of fire. WM - B157118
anti-tank weapons, the German patrols were out every night trying to destroy our tanks. Only once did they ever achieve any degree of success and this was early in December in a blinding snowstorm. On one occasion they came to the position of almost every tank, so it was not surprising that even at night in a snowstorm one patrol located a tank. From a range of a few yards, they fired a hollow-charge armour piercing shell at the tank and hit it. Fortunately the shell hit the outer edge of one of the tracks and exploded its force on the track plates. It did very little damage to the tank and not one member of the crew was even scratched. The crew could of course see nothing, but opened fire in the direction where they thought the enemy patrol might be. Next morning we discovered two dead bodies.

“As a result of this novel way of holding the line, our casualty rate dropped from a high figure to nil. Also, we found that we needed fewer men actually in the line and so we could ring the changes and get people away on short leave. Before long we had trained patrol teams who would go out almost every night giving the enemy a little of their own medicine. They also made sure that no mines were laid on one of the roads which we used. One night 12 anti-tank mines were laid on one of the roads; fortunately a patrol found them.

“During the day there was very little activity and we tended to think that the Germans would not venture out of their defences in daylight. How wrong we were. One Sunday afternoon in November, my second in command, Bob Romsey, and I decided to go down to the seashore. I now had some French soldiers under my command and they were manning a position in the sand dunes. We decided to visit them. As we arrived, all hell broke loose and I realised that the Germans were about to assault this small stronghold. This was the first time these men had been in action and it was just as well that we had turned up, despite the fact that we were only armed with walking sticks; because they panicked and there was little chance of their escaping. Bob was slightly lame, so I told him to take command while I set off at the double across the open ground to get help. Fortunately, I was some 300 yards away before the enemy opened fire on me and once again my luck held. I was able to wake up the crew of some tanks and get them into action, but it was a close thing and taught a lesson.”

Shortly after this excitement Rea was ordered to leave 7 RTR and take command of 5 RTR who were then in action near Sintel in Holland. The Dunkerque garrison would remaininvested for a further seven months, being the last French town to be liberated on 10 May 1945, by which time three-quarters of its buildings had been destroyed in the siege.

Clearing the Schelde

The capture of Antwerp on 4 September 1944, with its port facilities in good condition, did not immediately solve the Allies’ supply problems, because the Germans still held the Schelde estuary and could thus prevent shipping from using the port. SHAPE considered the opening of the port to be of vital importance and gave absolute priority to the clearing of the area. As Montgomery later wrote in his memoir, Normandy to the Baltic,

“It had become necessary to devote the whole of our resources into getting Antwerp working at once, and

I had to shut down all other offensive operations in 21st Army Group until this object was achieved.”

Operations in the estuary area were not made any easier by the fact that much of the area consisted of reclaimed land — flat, muddy and in some places flooded. The Allies did, however, have two very useful assistants in such circumstances: one was a number of the remarkable AFV’s of 79th Armoured Division, the other the Royal Navy Support Squadron, whose rocket-firing/AK1 guns would prove to be invaluable. Combined with the bravery and determination of the Canadian and British troops, together with excellent sea and air cover, eventual success was assured, but not before a difficult, hard-fought campaign against a tough and resolute enemy had been waged, lasting from 2 October until 8 November. Even before the fighting was over, minesweepers were already clearing the river ahead of the first convoy.

The Plan

The clearing of the estuary involved the capture of three separate but related areas:

- The coastal plain between Terrezeau and Knokke (known locally as 'Breken's Island' though it was actually part of the 'mainland') where heavy coastal batteries at Breken and Cadzand covered the approaches to the estuary.
- The isthmus and peninsula of South Beveland, which stuck out into the Schelde.
- Walcheren Island, where some 25 heavy batteries covered shipping in the estuary.

The area was garrisoned by tough seasoned troops, many of whom had fought on the Eastern Front. The 64th Infantry Division held the mainland south of the estuary (the division had been left isolated when Fifteenth Army had withdrawn eastwards). Walcheren was garrisoned by the 70th Infantry Division, which, as already mentioned, was known as the 'Whitebread Division' because many of its troops had stomach problems and special diets, although this did not seem to affect their fighting ability. On South Beveland there were the elements of a divisional battle group and between the estuary and Turnhout were troops from the 346th, 711th and 719th Infantry Divisions. The clearance plan was to be in three phases:

1. Clear Breken’s Island, whilst sealing off the South Beveland peninsula by a thrust from Antwerp.
2. Clear South Beveland by advancing along the isthmus in conjunction with an amphibious assault across the estuary from the south.
3. Capture Walcheren by a series of concentric assaults from east, south and west which would entail a second crossing of the estuary to take Vlissingen, together with a seaborne assault coming from one of the Channel ports.

Execution of the Plan

On 1 October Phase 1 began, with 2nd Canadian Infantry Division crossing the Antwerp-Turnhout canal and advancing westwards towards the outer suburbs of Antwerp. Resistance was scattered and by the evening of the 4th, the Canadians had cleared the Merksem-Ekkeren area and their leading troops had reached Puine, about half way to the peninsulas. They continued to make steady progress, but as they approached Kortem resistance increased and they were unable to capture the village. The Germans launched a series of

Buffaloes belonging to 5th Armoured Regiment RE and Sherman Crab of 1st Lothians, both of 79th Armoured Division, are backed onto LCUs for the Walcheren operation. Over 100 of these amphibians were used in the operation, managed by 5 ARRE and 11 RTR. Author's collection

Right: The 79th Armoured Division provided maximum assistance to the British forces during the Walcheren operation, as can be seen from this photograph of a Sherman tank in a Walacci cargo carrier. There is a dramatic scene in Picture 142, showing the rotating drum on thenil, which behind it is a Churchill IVRE, which had a powerful ring over motor ideal for use against enemy blockhouses. Author's collection
counter-attacks, but on 16 October the village of Woensdrecht was captured.

Meanwhile, on the right flank of the Canadian Army, I Corps advanced against the Nieuporter-Turnhout Canal. The Polish Armoured Division crossed the Dutch frontier north of Merksem on 1 October, 49th Infantry Division at this time being part of the Eastern Front of St Lénans. In the first week, the leading troops were only about four miles from Tilburg and held on for several positions against counter-attacks. Then, in late October, the 4th Canadian Armoured Division and US 104th Infantry Division were switched to join I Corps and made steady advances, capturing the bridge at Merchtem on 27/28 October, while the leading troops of 2nd Canadian Infantry Division reached the canal, only to find that all the bridges were blown. On the 3rd November, they set about to get a Class Bridge across the canal by midday on the 29th at a point near Valker. At about the same time the 6th Polish Armoured Division captured Bergen-op-Zoom. By the 30th the Canadians had reached the eastern end of the causeway across to the Belgian shore, and the Belgian command, by a show of force, had forced the remaining troops which remained on North Beveland. Whilst all this was taking place, progress continued on 'Breakers Island', so that by the beginning of November, Woensdrecht was practically isolated, then later, on the 3rd, Zeegbeugel fell. Thus the whole of the southern bank of the Scheldt was now clear and all that remained in enemy hands was Walcheren Island.

The estimated garrison on Walcheren were some 6,000 men, and there were heavy coastal batteries in concrete emplacements covering the entrance to the West Scheldt. To the west and south of Walcheren were extensive underwater obstacles, while wire and minefields blocked all the beach exits. Vlissingen had a sophisticated perimeter fence system with a double line of anti-tank ditches. And there were the normal natural and man-made obstacles such as dykes and flooding.

However, Allied commanders realised that perhaps these features could be turned against the defenders, by breaching the sea dykes and flooding much of the island, thereby making many of the artillery positions untenable and restricting their movement. But the initial breach of the Scheldt force could then take on the enemy from the rear. Accordingly, in early October the sea defences were breached by some highly trained engineers. The 120km long gap was soon widened by sea dykes in four places. Further bombing then gradually widened the gaps, so that by the end of October the island had been isolated from the mainland. The most southern gap, about 500m wide, between Westkapelle and it was 100m wide by about 3m deep at the low water mark. One month[1]. We turned about, still engaging the enemy and the captain took the craft in between the helpless LCF38 and the shore batteries. We were so close that we could have touched them.

"As we were transferring the wounded and survivors from LCF38, the Germans concentrated on us and shells and machine guns began to close in on us. Everyone. Suddenly we see a blast—it was looking at the blast, which was just an ash and actually saw the shell (blasted). I watched the big barrell being sucked in the blast and a giant condenming finger. An orange flash and immediately the ship staggered as we were hit. Shrapnel hit the crew of one and down. But there was no explosion. Just as quickly as possible we cast off from 38 and left her adrift with her dead, while we continued to engage the enemy."

At the end of the action, LCF36 managed to limp back to Overmere, and was then ordered back to its home port of Poole. In fact, by using the hand-pumps continuously, the crew just managed to get it to the shore. The Channel to reach Newhaven. The skipper, Lieutenant N. E. Elmans, RNVR, was awarded the DSC and the crew an extra rum ration, while a high gate at the parish church of Hamilton, near Poole, was built in memory of those who died in the Walcheren operation.

To return to the landing operation, the LCTs carrying the breaching teams from 79th Armoured Division came ashore under heavy fire from the Wessel. The Germans had many casualties, however, some of the AFVs did manage to land and materially assisted the commandos in capturing the Netherlands. Further operations were planned, and after the Winnendam decision had been extended to reach the north end of the island, where the Domburg battery was knocked out, partly by tank shellfire on the permanent sites.

Middelburg was captured on the 8th, what was left of the town had been blown up by the Dutch and a German Feldwebel Wilhem Daser, RN, mineweepers immediately began the sea way to Antwerp, but it took three weeks of continuous work to make it available. After the 120km channel was safe to use, the first convoy berthing in Antwerp on 28 November. The Germans had fought with stubborn bravery, losing many men, including some 10,000 taken prisoner. However, the Allied casualty figures were also considerable — 27,633 killed, wounded and missing.

Liberating the Channel Islands

In stark contrast to the bitter and bloody fighting involved in reducing so many of the Festungens in the battle area, the surrender of the massive German garrison on the Channel Islands came as a complete anti-climax, although I am certain that all the Channel Islanders must have been holding their breath to see what would eventually happen after some of the bellicose remarks made by the Commander in Chief of the Channel Islands Befehlshaber der britischen Kanalinseln — General Alfred Schaal Vizeadmiral Friedrich Hüffmeier. He had in fact been plotting his escape out of his predecessor, Generalleutnant Graf Rudolf von Schmettau and succeeded at the last minute. The extremely slow and unselfish move of the German owners to get the ships to the southern coast of the island, in a speech he then made to his officers in the Odeon Cinema, Jersey, "and that is to hold out until final victory." He also went on to work in one of the bars where the German soldiers used to go for beer he took his soldiers out grass before he allowed them to surrender.

The British were naturally interested to know if the German garrison would fight or not, because although they had heard of the garrison being subject to malnutrition, it still had substantial fortification, and was equipped with a range of defence batteries and weapons of all kinds, manned by the largest infantry division in the entire German Army. So, for some time, they assumed the worst and set up an airfield, and trained troops to take the island by assault. Under the auspices of HQ Southern Command, the relief force began training in Devon, which it was understood, was to be led by the British 115th Infantry Brigade, a TA Infantry Brigade which had been formed in September 1939, but as yet had never served outside the UK. It was now the turn of the commander being Brigadier Alfred Snow OBE, a none nonsense man, who ordered a training area near the code- name "Nestegg". TF115 initially consisted of the infantry brigade together with a number of heavy anti-aircraft and coastal artillery units which were then to be assigned to his command. By such a great demand since the threat of invasion had all but vanished. They were later given rigorous training in street fighting in bombed areas of London and generally prepared for the operation. However, as 1944 gave way to 1945, it became clear that it was crazy to keep a well-trained..."
and motivated infantry brigade cooling its heels in England, when there was a continual shortage of infantry in fighting the Germans in North-West Europe. So 115 Brigade was sent over to 21st Army Group from its brigadeyard and its place was taken in TF135 by three artillery regiments 614, 618 and 620. The new ‘infantry’ brigade was given some hasty basic infantry training and made ready for action.

No 20 Civil Affairs Unit

This was a special unit within TF135, which would be of prime importance in getting the islands going again. In the run-up period, it was made responsible for collecting all manner of items which it was considered would be needed by the islanders. Food was top priority, then clothing, with some 200 tons of essential supplies ready for immediate distribution, all pre-loaded onto suitable transport. These supplies included three months’ rations for the entire population (not including the German garrison) calculated to raise the diet to a healthy 2,750 calories a day, then the normal food supply chain would take over. Clothing equal to 15 months on the current UK clothing ration would be included, followed up shortly by a further 15 months’ supply. The food and clothing would be sold through the shops at current UK prices, while, as a goodwill gesture, there was a free gift of chocolate, cigarettes and tobacco. The unit also stockpiled a large range of basic household items and to boost female morale even included a range of cosmetics.

By early May it had become clear that Germany was in total collapse and that liberation for the Channel Islands was at hand. TF135 was brought to a high state of readiness, while, with SHAEF approval, HQ Southern Command began trying to open surrender negotiations. Subject to you being satisfied as to the intentions of the German Commander, Channel Islands,’ signalled SHAEF, ‘you should complete mounting and launch of [“Netting”] earliest practical date.’ Accordingly, TF135 was assembled at Plymouth on 7 May and married up with its full laden ships and landing craft. At the same time GOC-in-C Southern Command signalled Helfmeyer to say that he was authorised to receive his unconditional surrender. But the Vizeadmiral was not going to submit without at least a show of defiance. He replied that he only took orders from his own government. However, in the early hours of the 7th, word was received that the Germans had signed the unconditional surrender and that all hostilities would cease at midnight on 8 May. This was followed by a signal from Helfmeyer proposing that his representatives meet the British representatives some 7km south of the Le Hanois light to sign the unconditional documents. This was agreed and the time for the meeting set as 12.00hrs, Tuesday, 8 May 1945.

Each carrying a landing party of two officers and 20 other ranks, the two RN destroyers HMS Beagle and HMS Bulldog left Plymouth at 10.00. Brigadier Snow was on the Bulldog and reached the RV without a hitch. Kapitänleutnant Armin Zimmermann, representing Helfmeyer, came aboard. He then told Brigadier Snow that he was only authorised to discuss the armistice and could not sign anything. Snow replied in no uncertain terms that he must return and prepare for an unconditional surrender. Zimmermann countered by saying that the general cease-fire did not begin until midnight and that if the destroyers did not withdraw they would run the risk of being shelled by the German coastal batteries. Rear-Admiral Sturt, the Naval Town Commander, who had been instructed to avoid confrontation at all costs, decided to withdraw out of range. A signal was shortly afterwards received to say that Helfmeyer’s deputy, Generalmajor Siegfried Heine, would be at the RV at midnight and that he would be authorised to sign. This he did, signing eight copies of the surrender document at 01.14hrs on a rum cask on the quarterdeck of HMS Bulldog. The destroyer then moved into St Peter Port harbour and the Guernsey landing party went ashore. Meanwhile, Brigadier Snow transferred to HMS Beagle, then headed for Jersey, anchoring off St Helier and sending for the island commander, Generalmajor Wulf to sign the surrender of Jersey. On his arrival, Wulf, another fervent Nazi, was somewhat aggressive and arrogant, causing Brigadier Snow to ‘express his displeasure in the most forthright language’. This completely took the wind out of Wulf’s sails and he signed the surrender document without any further nonsense. The landing party then disembarked and thence followed flag hoisting ceremonies on both islands, together with the reading of King George VI’s royal proclamation.

TF135 Lands

‘Bev’ Bevis of the Royal Engineers remembered what happened when he came ashore:

“They sent me off first. They said, ‘Bevis, you go first. You’ve got 3.5 tons, so if you blow up they’ll know we arrived.’ I had got sandbags all around me, I could just move my hands and feet. Once ashore then our job was clearing mines that had been missed and God knows what else. When we first landed it was huge and biggest from the ladies. The men shook our hands, patted our backs and asked if we had any cigs. We gave the children sweets — they thought it was Christmas! One thing sticks in my mind. I was standing by my lorry and the lads were clearing a ferry story, making sure there were no booby traps, when this old lady came to me with tears in her eyes and she said: “There you are, I always said that an English soldier would have the first strawberry and you are be.” And I had to stand there and eat, and I cried with her.”

Notes
1. Collins had been given this nickname early in the war at Guadalcanal, when one of his soldiers in a forward foxhole was heard to remark: ‘By God, there is J. Lightening himself!’ — ‘Lightening’ being the telephone code for his name. His name had been dropped from the Black List because of enemies, who had spread the soldiers’ names to the Germans. J. Lightening had been changed to ‘Lightening’, and the nickname stuck therefrom.
2. Leakey’s Tank ridden by George Formby.
3. These included 10 Crab Flails, eight AVROs with Small Box Girder bridges and turrets, and four half-tracks.
4. This was an obsolete reference to the severe shortage of food on the islands in the winter of 1944/45 — which became known as the ‘Great Hunger Winter’, which was such that the dead cross had to bring in food packets for the civilians. The German garrison had been very short of rations ever since the Normandy landings had virtually cut them off from the Continent.
Chapter 11
Conclusions

Why the Wall Failed
Having looked at aspects of the designing, building, manning and defending of the Atlantic Wall, we must now try to decide why it did not prevent the Allies from successfully invading Normandy. We need to examine this question both from the defenders point of view as well as from that of the attackers. We need also to consider whether the German military ever thought that it would prove to be 100% effective, or rather just a means of slowing down the assault so as to give them time to defeat it in other ways.

From the German Side
Lack of a Unified Concept of Defence
First and foremost, the failure of the Germans to repulse the Allied invasion did not just depend upon the strength of the defences which formed the Atlantic Wall. It also depended upon the strategic distribution of German forces within North-West Europe. There were just under 60 divisions available in the west, but of course their strength, weaponry and fighting ability were not universally high, many of the infantry divisions being suitable only for local, static occupation use. In addition, only a few infantry and armoured divisions were up to anything like full strength, while many of the Coastal divisions actually manning the Wall contained an alarming number of what were described as ‘Eastern Volunteers’ whose combat abilities and loyalties were suspect from the outset. We have already dealt with the rivalries, differences of opinion and of tactical concepts between the Heer and the Kriegsmarine, and also between various factions within both services; these were the most important factors which militated against a successful, unified command. The ‘Panzer Controversy’, for example, which I have highlighted, was a major expression of this internal squabbling and it was never resolved. This meant that there was never anything that could have been described as being a unified concept of defence on the Western Front.

Lack of Weapons and Equipment
As well as a shortage of forces, there was undoubtedly an acute shortage of weapons and equipment in all three services of the Wehrmacht. Almost everywhere there was a shortage of naval vessels, a shortage of fighter aircraft, a shortage of infantry weapons, a shortage of armour and artillery, and a shortage of mechanised troops, with too many horses still performing front line duties. Despite the individual excellence of such basic items as the MG42 — probably the best light machine gun of the war — the MP40 sub-machine gun, and the Panzerfaust and Panzerschreck hand-held anti-tank weapons to name but four of the basic German weapons, they just could not compete with the overwhelming fire power of the Allies, especially the Americans. It also did not help having a mixture of captured weapons in front line service, in particular artillery, which helped to complicate ammunition supply and led to ammunition shortages even for the ‘sharp end’ troops defending the beaches.

Lack of Agreement on the Most Probable Site for the Invasion
Equally important was lack of agreement at high level as to the most likely location for the coming invasion. Von Rundstedt and Rommel had for a long while generally agreed that the sector north of the Seine, in particular the area between Boulogne and Le Havre, was the most likely landing area. Nevertheless, the coastline of Normandy and Brittany was a close contender and became more likely as the days of spring 1944 lengthened into early summer. However, whilst they recognised this change, the German command did very little to alter the allocation of troops, or to take any real extra precautions. Even though Adolf Hitler had seen the Cotentin peninsula and the port of Cherbourg as becoming increasingly important, expressing this view at several meetings, nothing was actually done about it. These differences of opinion came to a head on 6 May, when von Rundstedt categorically turned down Rommel’s requests to strengthen the Cotentin peninsula defences. Hitler’s HQ supported Rommel, but in too half-hearted a manner, intimating that, while they agreed that the Cotentin could well be the first enemy objective, they could not agree that the western bay of the Seine had become the most probable landing area.

Other commanders at a slightly lower level also agreed that the main landing area would be Normandy — these included General Erich Marcks, commander of LXXIV Army Corps, who would be right in the thick of it when the invasion came. Nevertheless, voices like his were crying in the wilderness as events would show.

Spies on the Atlantic Wall and other Subterfuges
As mentioned at the start of Chapter 6, the incredibly brave ‘volunteer’ spies and their handlers who operated in all the occupied countries, often under the very noses of the Gestapo, played an important role in ensuring that the Allies kept as much as possible about the German defences prior to D-Day. Add to this the constant flow of information obtained from Ultra, air reconnaissance and all the other methods of gaining up-to-date facts and figures and it is clear that intelligence played a vitally important role in the planning stages of ‘Overlord’ and thus in the Allied success. Furthermore, the mass of misinformation fed to the German intelligence services, typified by everything to do with Patton’s mythical army group, waiting to strike at the Pas de Calais, also undoubtedly played its part in helping to breach the Wall.

What Leading Germans Thought
It is interesting to read what has been written about the Wall by senior Wehrmacht officers and Organisation Todt staff. Most of these views were written after the war, so are presumably given with the benefit of hindsight and the knowledge that Hitler was safely under the soil. I doubt if they would ever have been brave enough to voice such defeatist opinions whilst the Führer was still alive.

A Propagandist’s Bluff
“The Atlantic Wall was a propagandist’s bluff; it was not as strong as it was believed abroad.” These are the words of General der Infanterie Günther Blumentritt, who was Chief of Staff OB West. He continued:
It was very strong on the coast of Holland and in the Fifteenth Army sector on the Channel. However, the batteries of these mighty concrete works were silent when they were blasted and it was clear that heavy naval artillery. The guns had only limited traverses; they were sunk to fire at an angle of 20 degrees, to a depth of one kilometre, they would be in free terrain. The installed guns were captured French, Belgian, Dutch, Polish, Russian and Yugoslavian and calibres with a variety of ammunition. Many had only a limited number of rounds available. Under heavy bombardment from the air and strong artillery fire, blasted by smoke and attacked by airborne troops from the rear, the “Wall” could never have stood an invasion. It was apparent that these concrete monsters were greatly overrated. We had to assume that these facts had been made known by the many foreign workers.

Blenheim wins on to explain just where the staff at OB West had considered the most probable invasion sites to be. ‘The wide, flat terrain of Normandy and Brittany’ were one area considered, but discounted as it was thought that the road to Germany was too long from either of these locations. A landing in the Bay of Biscay in the First Army sector was possible, especially because there were 500 km of coastline to be defended by just three divisions, of which two were composed mainly of recruits, but this site was just as far away. They considered a simultaneous assault on the Mediterranean coast to be a distinct possibility, but only to contain the German reserves. He comments that OKW, on several occasions, considered that landings might be made in Spain and/or Portugal, but OB West considered this even more unlikely for both political and military reasons — the terrain, railways and roads were unsuitable, the Pyrenees would have to be crossed and ‘the Spaniards fight well on his own soil’. After considering all these possibilities they went for the Fifteenth Army sector as being the most likely invasion location, between Calais and the mouth of the Seine. He also had to say about the level of support they had expected from the Air Force and Navy:

“The ratio of air strength between the Luftwaffe and the Allies on 6 June 1944 was 1:25. The Allies had not only an superiority, but complete mastery of the air, with obvious consequences for us. In the entire OB West area, the Navy had only 12 destroyers, I do not recall the number of E-boats. There was only a limited supply of naval mines. The Resistance movement in southern France was so strong that troop movements were delayed, communications were broken, amphibious casualties were sustained as the result of ambushes.”

An Over-Sized Construction Project

“As a result of Hitler’s distrust of the Army officer corps he brainstormed their field of employment even more and more. This development begins with the assignment of fortification construction (the West Wall) to Todt...” As the Wall, which nonetheless may have had a certain psychological importance at the beginning of the war although it was never of any strategic value, his (Hitler’s) dictatorial order led to the construction of the Atlantic Wall, an over-sized construction project which caused serious damage to our Army and East through its expenditure of labour, material, without presenting any ostensible worthy of the name to the enemy invasion of 1944.

These caustic comments were written by General Franz Halder in a pamphlet he wrote entitled “Hitler as a General” which is quoted by Franz Xaver Dorsch, Deputy Chief of the OT, in his dissertation on the Organisation Todt. Dorsch, however, as one might expect, had been impressed by the way in which the Wall had been constructed. In the aftermath of the witch-hunt that followed the bocched attempt on Hitler’s life, and led to Rommel’s forced suicide on 13 October. He picked out the significance of the organisation Todt, on high in the Navy, was interested in the work done in the U-boat factories.

“Neither tactically nor strategically proficient” Rommel’s brilliant chief of staff General Hans Speidel was more scathing about the OT than he was about the Atlantic Wall itself, although we have already seen how disappointed Rommel was when he carried out his first inspection, “The whole development of coastal defence,” wrote Speidel in his book We Defended Normandy.

“Hitler’s obsession with the design and layout of the fortifications, had been entrusted to an engineer of the Todt organisation, who was neither tactically nor strategically proficient, had no knowledge of the general war situation and no experience of co-operation with the armed forces, and had made no effort to plan an adequate system of defences between the Army, the Navy and the Todt organisation, as between 1941 and 1943 the services had failed to agree upon basic principles.”

He goes on later to explain how propaganda for the Atlantic Wall had begun in 1942, when the Dürpke raid had been beaten off, German propaganda had claimed a major success for the defences — in order to distract public attention from the reverses on the Eastern Front, and the high command in the West had:

“...regrettably associated itself with these optimistic claims. Goebbels had experience of “building-up” a defence line” from the summer of 1938 when he put the “West Wall” of Germany on the map. Now he did the same for the Atlantic Wall. He picked on the strongest and most heavily “defended” section of it, the “uninvasionable batteries group” at Cap Gris-Nez, and made it appear to the whole world that the Atlantic Wall was of equal strength.”

And Rommel Himself

Being an entirely practical and pragmatic soldier, Rommel did not waste his breath complaining about the failure of the Atlantic Wall to stop the Allied landings, but rather expended his energies on fighting the battle in Normandy until his disastrous encounter with Allied fighter-bombers on 17 July. This ended his command of Army Group B as he sustained severe skull injuries and had to be rushed to hospital. Sadly, his remarkable reputation was damaged by the aftermath of the witch-hunt that followed the bocched attempt on Hitler’s life, and led to Rommel’s forced suicide on 13 October. Therefore we will never know what his frank postwar assessment of the Wall would have been. Certainly from what he did mention in various battle reports after D-Day we get the impression that he was entirely satisfied with the way the troops actually defending the Wall had performed. For example, in a situation report written on 10 June, he said:

“As a result of the stubborn defence of the coast defence troops and the immediate counter-attacks launched by the available minor reserve, the enemy attack, despite the strength of his effort, has gone considerably more slowly than he had hoped. The enemy also seems to be committing more forces than he had originally planned.”

Elsewhere in the same report, when discussing the massive enemy use of heavy naval guns — he says that at least 640 heavy naval guns were involved — he comments:

“The effect is so immense that no operation of any kind is possible in the area commanded by this rapid-fire artillery.”

Left: The devastation caused by Allied bombing — this is part of Calais — proved a continual threat to the German garnishment and made daylight virtually impossible. Wwii CL; 1938

Above: As the German Omar N. Bradley, photographed here in London after VE Day, said: “We had only to concentrate a force against some single point in his lines. With the firepower we disposed we could break a hole in that line and pour our follow-up forces through it.”

Author's collection
either by infantry or tanks. Yet, despite this heavy bombardment, the garrisons on the coast and the units who counter-attacked in the Montenegrin area have held their positions with extreme stubbornness."

The Atlantic Wall Existed Only in the Pas de Calais
Finally in those "some-truths" on the Atlantic Wall, I have chosen German author Paul Carell, who in his book Invasion — They're Coming! speaks for the ordinary rankers who would have to fight the battle in Normandy. After commenting on the high average age of the soldiers, naval gun crews and others who were charged with the defence, he asks the question:

"But was this disadvantage not offset by the insuperable Atlantic Wall? Was there not an iron shield of concrete, steel, guns and mines? Was the coastline not thick with menacing concrete fortresses equipped with powerful naval guns? And was the foreboding from Breton to Ostend not fettered with ingenious death-dealing obstacles? The answer, unfortunately, was no. In the summer of 1944, the Atlantic Wall existed only in the Pas de Calais. For the rest it consisted of a string of widely spaced strongpoints, some of which were only half finished. Only a few of the heavy batteries were adequately protected or even equipped. Most of the equipment consisted of captured enemy guns, totally immovable against naval targets because of their calibre and their lack of fire-control equipment."

From the Allied Side
Those at the Top
In his memoir Crusade in Europe, the Supreme Allied Commander, General Dwight D. Eisenhower, after explaining why the UK had been chosen as the main base for operations in Europe, goes on to say:

"From that point on we encountered the obstacle on which all discussions split and practically exploded in our faces. This was a very definite conviction, held by some of our experienced soldiers, sailors and airmen, that the fortified coast of the Pas de Calais would be successfully attacked. Already much was known of the tremendous effort the German was making to secure integrity of his Atlantic Wall. Moreover, a considerable amount of the German Air Force could still be disposed in those areas and important elements of his fleet were lying in the harbours of northern France, in Nortre-mer, and in the Baltic Sea. The coast-line was guarded with U-boat nests, while undersea mines were rapidly covering every possible approach. . . . Many held that attack against this type of defence was madness, nothing but military suicide. Even among those who thought direct assault by land forces would eventually become necessary, the majority believed that definite signs of cracking German morale would have to appear before it would be practicable to attempt such an enterprise."

Eisenhower explains that, fortunately, a few others took an opposite view and goes on to describe how they formulated a new concept, as he puts it:

"almost a new faith, to strategic thinking, one which envisaged the air-co-operation with ground operations to the extent that a ground-air team would be developed, tending to multiply the effectiveness of both."

While he is naturally inclined to emphasise the American role in the decision to make an attack across the English Channel, it was of course a decision made between the British and American governments that this would be their principal offensive effort in Europe. The plan received President Roosevelt's blessing on 1 April 1942 and the following month a body known as the 'Combined Commanders' was set up to get to grips with the problems. Following the Casablanca conference of January 1943, it was decided to set up an Allied inter-service staff (COSSAC) to prepare a definite plan for Operation Overlord.

Weinstein Choate, in Volume V of his History of the Second World War, deals with the question of where the landing could best be made:

"There were several options, the Dutch or Belgian coast, the Pas de Calais between the months of the Somme and the Seine; Normandy; Brittany . . . Normandy gave us the greatest hope. The defences were not so strong as in the Pas de Calais . . . All the coast between Haaye and Cherbourg was of course defended with concrete forts and pillboxes, but as there was no harbour capable of mantaining a large Army in this 50-mile half-moon of sandy beaches it was thought that the Germans would not assemble large forces in immediate support of the seashore . . . If only there were harbours, which could nourish great armies, here was the front to strike."

Churchill went on to explain how, as far back as May 1942, he had given the go-ahead to the building of the Mulberry Harbour. He described it as a 'particular charm of the charm', and its main purpose was to keep the Germans out at sea. Thus, whilst not discounting the strength of the Atlantic Wall, Churchill's fertile imagination had already found a major key to breaking it into:

"And what of the general who would command the initial landings . . . He would have been personally responsible for the simple, clear plan which eventually became the basis for 'Overlord'? He forecast that the fighting would be extremely hard, that Rommel was still in charge of the Atlantic Wall. Monty's intelligence experts had rightly come to the conclusion that Rommel would try to defeat them as they came ashore, pushing forward his reserves, rather than assembling them to fight in depth — the fact that Rommel would be countered by his own side, was of course not even considered as a possibility. However, he appreciated that Rommel would need to commit his armour as. Monty's biographer Nigel Hamilton says:

"By personalising the enemy as "Rommel", (Montgomery) was able to clarify and simplify the scenario — alerting all to the sense of contest between opposing wills: "Since Rommel towers the Atlantic Wall the enemy has been stiffening up his coastal troops, generally strengthening his defences and re-distributing his armoured reserves. The present trend of movement of his mobile reserves is South — i.e. away from the "Neptune" ("Overlord") area; this shows that our target is not yet known to the enemy. Rommel is likely to hold his mobile Divisions back from the coast until he is certain where our main effort is being made. He will then concentrate them quickly and strike a hard blow; his static Divisions will endeavour to hold on defensively to important ground and act as pivots to the counter-attacks . . . Some of us here know Rommel well. He is a determined commander and likes to hurl his armoured forces into the battle . . . but according to what we know of the chain of command, armoured divisions are being kept directly under Rundstedt and delay may be caused before they are released to Rommel."

How different things might have been if Rommel had actually had control over Geyr von Schweppenburg's Panzer Group West and had been able to move it freely from the outset without the continual threat from Allied air superiority.

General Omar N. Bradley, known as the Soldiers' General, remembered one of the maxims of Frederick the Great: 'He who defends all, defends nothing. Little minds want to defend everything, sensible men concentrate on the essential.' As Bradley himself put it:

"Unable to anticipate where we might strike, the enemy had been forced to spread his strength across 860 miles of European coastline. As he continued to plant more German dead on his long line of retreat from Russia, it became increasingly difficult for him to man the Atlantic Wall. To smear our way ashore we had only to concentrate a force against some single point in his line. With the firepower at our disposal we could breach a hole in that line and pour our follow-up forces through it.

Bradley then went on to affirm that the Atlantic Wall would never have had an intruder, but that it could, and did, slow down an attacking force whilst reserves were summoned to counter-attack. In other words, it was there to:

'blunt our assault and so split our forces so that the enemy might find it easier to form his reserves and strike back in counter-attack. When used to screen a mobile reserve in this fashion, the concrete fortifications of a fixed defensive line can be worth many divisions. Without these mobile reserves, however, a fixed defensive line becomes useless.'

Note
1. Cherbourg was almost completely left alone by Allied bombers in their air attacks before the invasion — an indication that they wanted to use the port facilities in due course.
2. As agreed in the D-Day invasion — the German Army of Elb-Estern were being inspected by Allied troops. ISM — B2520

This is, I believe, the most telling argument as to why the Atlantic Wall failed. Fortunately, it would appear that in the past Hitler thought somewhat differently — remember the Führer's remarks mentioned in Chapter 2, when he said after talking to one of the workers who built the wall: 'it's a man hates to abandon such safe positions as those on the Channel coast, captured during the campaign in France and consolidated by Organisation Todt. Fortunately he either did not remember the words of Frederick the Great with which I began this section or chose to ignore them.

"He who defends all defends nothing" — perhaps that would be the most fitting epitaph for Hitler's Atlantic Wall.
Chapter 12
What Remains to be Seen

Although today many of both the major and minor fortification works no longer exist, far more having been demolished since the end of the war in Europe than were ever destroyed in battle, there are still sufficient structures remaining to give anyone interested a vivid idea of what the Atlantic Wall must have looked like and how it was manned and operated. However, whilst buildings could be fairly rapidly evacuated by their erstwhile garrisons, what could not be left for posterity were the vast numbers of minefields, booby traps and other explosive devices which the Germans had sown, whilst all the defence positions had either to be rendered harmless, or in some cases their weapons and equipment (for example radar) handed over in situ to the Allies. Initially, therefore, there was a massive clean-up operation, much of the work being done by the German soldiers themselves — now POWs. One told me:

"Immediately after the war the soldiers of the Pionierkompanie (engineer company), and others under the age of 25 and single, had to clear the mines. The barbed-wire fences remained there . . . the mine clearing was a dangerous business and there were many casualties."

Tourist Attractions

As the various "owner" countries have now come to realise, there is money for their tourist industries to make out of the abiding interest of millions of people in many aspects of World War 2, including what is left of the Atlantic Wall. In addition to the general public, military historians have brought these fortifications into their studies in the same way as they have always been interested in more ancient structures such as castles, watchtowers, and defensive walls. Although it is in France and the Channel Islands where this has been most pronounced, there are excellent sites now open everywhere along the coastline of Europe which can be visited by individuals and parties, whilst organisations such as the Channel Islands Occupation societies, the Historic Fortifications Network and the Fortress Study Group, to name but a few (see Appendix I for more details) continue to research, repair and generally bring to life more and more of these fascinating sites every year. Thus after years of neglect, the Atlantic Wall has come alive again.

In this final chapter I have tried to give a general idea of what the visitor can expect to see in each country in which the Atlantic Wall was located, highlighting at least one or more 'not to be missed' sites, although in both France and the Channel Islands one is spoilt for choice. The selection of appropriate museums should be read in combination with Appendix II, which contains a more comprehensive, albeit less detailed, list.

A Word of Warning

Whilst there are plenty of recognised sites and museums for the average visitor, inevitably some people like to go 'off piste' and explore on their own, in the hope that they will discover something exciting that everyone else has missed. Not only will they invariably be disappointed, but such exploration can be downright dangerous. The Channel Islands Occupation Society always includes a word of warning in its yearly review, which I believe is well worth repeating here:

"Most of the bunkers, gun pits and defences are on private property. If you want to have a look, obtain permission from the owner. Do not enter without a strong torch or lamp. There are different designs of defences that from the outside look the same, but once inside, passages may descend without warning. Also, wellington boots may be needed as up to 50 plus years of dirt and dust will have blocked the drains. We would also warn you that bunkers on the coast will also have been used as unofficial toilets — so beware! Young people should not enter without an adult, as many bunkers have awkward steps and hidden ducts that can trap the unwary. Bunkers and tunnels have been blocked up for this reason and so out of those of you who would like to find an Aladdin's Cave of war relics have been beaten to it by the scrap drive of 1947-48."

Norway

First, two examples from Norway: Fort Austrått As has already been mentioned, various structures along the Norwegian coast have survived well because they were built on rock. However, one of the 'jewels in the crown' must be the 28cm triple gun turret at Fort Austrått, Lundahagen, Orland. It was originally the stern gun turret of the German battleship Gneisenau. Launched at Kiel in December 1936 and fully equipped two years later, the battleship had nine 28cm (11in) guns in three triple turrets (Aron, Bruno and Caesar), plus 12 x 15cm, 14 x 10.5cm dual purpose and 36 x 37mm AA guns. After seeing action during the early part of the war, the Gneisenau was badly damaged in February 1943, declared a total wreck and its guns taken on shore. 'A' turrets guns were set up as individual guns at the Hook van Holland. The undernamed 'C' turret was mounted as a mountain installation at Fell on the island of SotrÃ¥, west of Bergen, where there now is a museum (see Appendix III). 'C' turret came to Austrått.

Before it was emplaced the necessary shafts and tunnels had to be blasted out of the mountain and comprehensive concrete work carried out. The building work was done by 300-400 Serbian POWs, who lived in terrible conditions and were roughly treated. Many died during the work, which began in 1942 and was completed the following year. Test firing of the guns took place in September 1943. Also on site were the following additional weapons: 1 x 4.7cm anti-tank gun, 3 x 40mm Bofors Rak and 6 x 20mm flak guns. In the spring of 1945 the guns were jointly taken over by Norwegian and British troops and became part of the Tromsø coastal artillery brigade, later called Fort Austrått. The battery closed down in 1968, and in 1993 the Norwegian Defence Department gave 1.1 million kroner for restoration work. Once this had been completed, the battery was handed over to the municipality of Orland as a tourist attraction and was first opened to the public in May 1992.

Kristiansand Kannonmuseum, Movvik Southwest of Kristiansand along Route 457 is the only remaining 38cm naval
gun of World War 2. These guns were built by Krupp as the main armament of the battleships Tirpitz and Bismarck. The complex was operational by 1943 and named Batterie Varø. Together with the gun at Hanzholm, just opposite in Denmark, its main task was to protect German supply lines and deny Allied forces access to the Baltic. The battery remained in commission until 1952 as part of Norway’s coastal defences.

**Denmark**

All along the west coast of Jutland are considerable numbers of reinforced concrete fortifications, which are the remains of the Atlantic Wall. Some of them have been restored and have become museums. Here is a selection of the best.

*Fortification Tirpitz* The building of this bunker at Revsand began in 1944 and it was designed to house a 38cm naval gun. However, the German surrender came before it was completed and postwar attempts to demolish it failed. The museum was opened on 1 June 1991, after a most successful project for unemployed young people who carried out a lot of the restoration work and gathered the exhibition material with the assistance of the Varde Museum, Blavandshuk Regional Museum. Exhibitions describe both the function and operation of the fortification, whilst there is a film The Atlantic Wall (currently only in Danish and German). Conducted tours and visits outside normal opening hours can be arranged.

*Museum Center, Hanzholm* Immediately after the German invasion in 1940, the building of ‘Fortress Hanzholm’ began, naval artillery positions being established to protect supply routes to Norway and the unfinished Hanzholm Harbour, whilst flak batteries protected the approach to Alborg air base. Four SK34 38cm naval guns were installed in individual casemates, each with a crew of 90 men. The battery became operational in September 1941. The Hanzholm battery was moved to its present location beginning in 1942 and completed in June 1944. The guns were never to fire in their new casemates. The civilian population was evacuated in 1942 and the area became a major defensive position, stretching from Agger to Svinvær. In the autumn of 1943 the first civilians returned, but it was not until 1959 that the fortification was declared free of mines. It can now be visited and the leaflet asks visitors to take particular care when inside the buildings, to bring a powerful torch, be careful where they tread and, above all, mind their heads!

*Fisker- & Stenalmuseum, Esbjerg* In the museum’s open air exhibition area, a German bunker has been opened and refurbished to the original standard. An exhibition of the fortification of wartime Esbjerg is also open.

*Langelands Fort* Although this is an excellent and well-maintained gun position from the Cold War era, the main battery comprises four 15cm guns from the Gneisenau. The main exhibition highlights the fort’s history and the Cold War in general.

*Strømhuset Hirtshals* — 10th Batterie Naval battery close to the Hirtshals lighthouse, where the bunker contains the main exhibition.

*Frederikshavn 'Batterie Nord'* Part of the German defensive system around this important harbour. The exhibition is housed in the fire control bunker and an emplacement complete with 10.5cm gun has been re-established.

*Silkeborg Bunker Museum* This was the German HQ during World War 2 and a barracks bunker has been re-opened. There are a number of other museums listed in Appendix II and one should contact the Danish Fortification Society for further details (see Appendix II). Many of the other Danish-based fortifications, especially those built along the west coast of Jutland, are still standing and recent years have seen a growing interest in the history behind their construction. Please see the Bibliography for details of two excellent illustrated books which cover these sites in considerable detail and are published by the Blavandshuk Egnsmuseum.

**Germany**

There are surprisingly few signs of the Atlantic Wall left on the German coast. A few bunkers can still be found in some areas — some have even been turned into weekend seaside chalets — but in general terms, and for obvious reasons, the Wall is no more. An excellent source of Atlantic Wall material is DAWA — Deutsches Atlantik Wall Archiv, the contact address being: Harry Lippmann, Schmittasse 151, D 51143 Köln, Germany. Herr Lippmann has himself written numerous books on the subject.

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Above: Tirpitz stillingen (Fortification Tirpitz). The bunker, designed to house a 38cm gun, was begun in 1944, but was never finished before the war ended. It is now a museum (opened in 1981), with numerous exhibits and a film showing all about the construction of the fortification. GPS
The Netherlands

There are various societies which want to preserve parts of the Atlantic Wall, for example Stichting Vesting Hoek van Holland, who recently dug out the remains of flak Batterie Nuermole at the Hook of Holland. Also do not forget Stützpunkt XXXVIIH at Waasenast, described in detail in Chapter 5, which was due to open to the public in the summer of 2002.

Kustverdedigingsmuseum

Housed in what was the Maasmond Fort, built to protect the entrance to Rotterdam Harbour, this is a major Dutch armour museum. Building work began on the fort in 1881 and it was completed in September 1889. It is built of concrete and brick, covered with earth. It saw action during the German invasion in May 1940. Its garrison in those days was nine officers, 28 NCOs and 246 men. Exactly 100 years after it was completed, on 1 September 1989, the Netherlands Kustverdedigingsmuseum was officially opened as a permanent coastal defence museum. It contains a large collection of items related to the Atlantic Wall, Postbus 9, 3150 AA Hoek van Holland (tel: 0174 382089).

Belgium

Raversijde Park

Raversijde Park not only contains the Sinctweddel/nec/Tiptip naval coastal battery of 6/M1AA 204 which formed part of the Atlantic Wall, but also the remains of World War I German coastal defences and the Prince Karel Memorial. Domein Raversijde, Dainststraat 142-B, B-9400 Oostende (tel: 059 702283). Behoerder (Curator) is Aleks Desyne.

France

Channel Coast

Batterie Todt & Atlantic Wall Museum, Audinghen Although the turrets, armour-plating and the doors have long gone for scrap, nevertheless this famous battery remains one of the best preserved of the offensive batteries. Casemat 4 contains some of the finest wall paintings of the Atlantic Wall, and also now houses the museum, created by David Davies, with some 3,000 objects in over 10 rooms. Outside displays of vehicles, weapons and equipment, including 'K5' a 28cm railway gun (tel: 0321 329733).

War Museum, Calais

20 rooms with many relevant exhibits, including a model of the famous Batterie Lindemann, Musée de la Seconde Guerre Mondiale, Parc Ste-Pierre, 62100 Calais (tel: 0321 342137; e-mail: mues阶梯teur@compgncte.fr).

Normandy

Without a shadow of doubt the most comprehensive guide currently on the market is Major and Mrs Hoel's Visitor's Guide to the Normandy Landing Beaches, the latest edition having been revised in 2000. It is a invaluable mine of information and highly recommended. There are five itineraries, for example, covering the five landing beaches, plus masses of other well-illustrated information.

The following are useful addresses for information on the museums, and other sites which have collections concerned with D-Day and the Atlantic Wall:

Comité Départemental du Tourisme du Calvados, Place du Canada, 14000 Caen (tel: 0231 279015).

Comité Départemental du Tourisme de la Manche, Maison du Département, 50000 St Lo (tel: 0233 360703).

Comité Départemental du Tourisme de l'Orne — 88 rue St Blaise, BP 50, 61002 Alençon (tel: 0233 298160).

Comité Départemental du Tourisme de Normandie — Le Doyenay, 14 rue Charles Courbieux, 27000 Evreux (tel: 0232 337900).

Caen Memorial

Largest of the many museums in Normandy, the Caen Memorial covers the spiral to war, the dark years of the Occupation, the D-Day Landings and the Battle of Normandy. In the International Park there is the Nobel Peace Prize winners' Gallery, Musée Mémorial, Faulconade & Eisenhowers, BP 6261, 14066 Caen (tel: 0231 060644).

Musée Memorial de la Bataille de Normandie Sitrated in the fine French town to be liberated, this large, splendid museum
located on Armомanches heights with views over what remains of the artificial harbour, a diorama about the landings in six different languages (running time 8 minutes), and a 15-minute RN archive film in seven different languages. Place du 6-Juin, 14117 Armомanches (tel: 02.33.22.34.31; web: www.normandy1944.com).

A Juno Beach Centre was opened in Courseulles in 2002. In the Gold Beach area is:

Musée America-Gold Beach This dual museum covers both the historic first airmail flight from the USA to France (29 June 1927) and the D-Day landings at Gold Beach. 2 place Admiral Byrd, F-14114 Veule-sur-Mer (tel: 02.33.22.58.83).

In the Omaha Beach area are:

Musée D-Day Omaha — 6 June 1944 Just a few yards from Omaha Beach, the museum has a collection of vehicles, weapons, uniforms and insignia found on the actual battlefield. Rue de Grandcamp, 14710 Vierville-sur-Mer (tel: 02.31.27.18.00).

La Pointe du Hoc Site of German battery position stormed by US Rangers.

In the Utah Beach area is:

Musée du Débarquement (Utah Beach) On the actual site of Utah Beach, this recently refurbished museum tells the story of the Utah landings. 50480 Ste-Marie-du-Mont (tel: 02.33.71.53.35).

Musée des Troupes Aéroportées Tells story of 82nd and 101st Airborne Divisions. Place du 6 Juin, 50480 St Mire Eglise (tel: 02.33.41.41.35).

Musée de la Libération The liberation of Cherbourg and the story of the port is told in this museum. In the port area of the town there is now also a road that is General Lawton Collins so named in honour of the commander of the American troops who liberated the port on 27 June 1944, Fort du Roule, 50100 Cherbourg (tel: 02.33.20.14.12).

More museums are currently in the process of opening. These include:

H644 bunker being opened by the Musée Memorial de la Bataille de Normandie; Batterie d'Avrillé — battery bunker being further refurbished.

Guided Tours of the Normandy Beaches

Although many visitors like to explore on their own there is a growing market in personal guided tours, some with expert British guides. Here is a selection:

a. Salent Tour. This is a British company that operates in France (NOT in the winter months) and gives a morning tour (1000-1300hrs) of the British sector and an afternoon tour (1430-1800hrs) of the American. They can be reached at: salenttours.com or on 0676 389689 (English spoken).

b. Normandy Tours. From Bayeux, picking up at hotels for tours lasting 4-5 hours (at 0830 and 1300), Book on 0231 921070.

c. Victory Tours. Departing daily from the tourist office in Bayeux, tours last 4-8 hours. Tel: 0231 519814.

There is even a ‘model tour’ of the beaches at: la Forteresse Volante in Rue de Cernet, Bayeux (02.33.51.92.25).

Atlantic Coast

Musée de la Bataille de St Malo Useful information on the battle for St Malo.

Musée de Sous-Marin Located in a former U-boat bunker at Lorient.

Le Grand Blockhaus This museum has been created in an authentic command/posting control/alphabetic finding post — one of the largest bunkers built on the Atlantic Wall. Five levels, with panoramic views over the sea from the top storey which is 20m high. On the Côte sauvage at Bâte-sur-Mer, F 44740 (tel: 02.40.23.88.29).

Ecomuseum de St Nazaire Covers the history of St Nazaire, including World War 2. Avenue de Saint-Hubert, 44600 St Nazaire (tel 0251 030303).

The Channel Islands

The best initial contacts are:

States of Guernsey Tourist Board, PO Box 23, St Peter Port, Guernsey GY1 3AN (tel: 01481 723552).

Jersey Tourism, Liberation Square, St Helier, Jersey JE1 1BB (tel: 01534 500700).

There are a number of restored sites and excellent museums in the Channel Islands, which feature all aspects of the occupation including the Atlantic Wall. The following are merely examples of the best.

Guernsey — Restored Sites

Naval Signal HQ This is a complex of three large concrete bunkers in the grounds of the La Collinette Hotel, which housed the Kriegsmarine Signal HQ. Now fully equipped and carefully refurbished.

Coast Defence Casemate A meticulously restored casemate at Fort Honomet, housing a 10.5cm K 331(f) gun.

Pleinmont Tower Direction-finding tower MP 3, unique to the Channel Islands, built in 1942 and now carefully restored. Battery Dollimann Covering an extensive area on the headland at Pleinmont, a continuing careful restoration is in progress.

Guernsey — Other Major Sites

L'Angle Tower A massive direction-finding tower.

Flak Battery Dolmen AA battery to the west of L'Ancreuse Bay.

Castle Cornet During the Occupation additional fortifications were constructed on this site which spans over 800 years of history.

Guernsey — Museums

German Occupation Museum Excellent wide-ranging museum on all aspects of the occupation, located behind Forest Church close to the airport.

La Valette Underground Military Museum Tunnels for massive fuel storage tanks have been converted into an award-winning museum.

Jersey — Main sites

Underground Command Bunker A command post some 12m deep on two floors. Noirmont Point, St Brelade. Open every Sat and Mon morning 10.00-12.00, Apr-Oct inclusive.

Coastal Artillery Observation Tower Massive, impressive structure. Noirmont Point, St Brelade, open most Saturday mornings 10.00-12.00, May-Sep inclusive.

10.5cm Coastal Defence Gun Casemate Contains original gun and other relics. La Corbiere, St Brelade. Open every Saturday 10.00-15.00, Jul and Aug.

M19 Mortar Bunker with Tunnel System An interesting complex which once housed a rare automatic mortar. La Corbiere, Open 11.00-16.30 on selected days, May-Sep.

Coastal Defence Gun and Anti-tank Casemates A twin bunker complex. La Clariere Point, St Ouen's Bay. Open 12.00-16.30 selected days, May-Sep.

Heavy MG Turret Bunker With steel cupola; one of only a few examples left intact. Val de la Mare, St Peter. Open 14.30-17.30 selected days, May-Sep.

Gun Emplacements and Underground Bunkers Meticulously restored coastal artillery battery position. Les Landes, St Ouen. Open most Sundays 10.00-15.00, Jun-Aug.

4.7cm Czech Anti-tank Gun Casemate Almost in original condition. Miltbrook, opposite La Rue de Galet. Open every Thu evening, 19.00-21.30, Jun-Aug, inclusive except for Battle of Flowers Day.

Most of these sites are also open on Liberation Day on 9 May.
The Atlantic Wall in Miniature

Some years ago Spencer Pollard, the editor of Military in Scale wrote about the first releases from VP Studios of a range of miniatures depicting concrete bunkers from the Atlantic Wall. Although this range has remained available since its 2001 debut, it has now been replaced by some stunning new kits. The new Atlantic Wall series will comprise a wide variety of different sizes and style of emplacement. The new kits will also differ from their predecessors in that some will be just as detailed as they are outside. Special items will also be available, like the guns which were used in these cisternlike buildings. It promises to be a very interesting new series. For further details write to The Editor, Military in Scale, Trapel Publications Ltd, Trapel House, Seven Drive, Upton-son Severn, Wores WR6 0JR.

Appendix I – Useful Addresses

Channel Islands Occupation Society (Guernsey), The Secretary – Major (Retd) E. Oazine, Les Jehans Farm, Torteval, Guernsey GY8 0RE (tel: 01481 64625).
Channel Islands Occupation Society (Jersey), The Secretary – Mr W. M. Gains MBE, 'Les Gounees de Bas', St. Ouens, Jersey JE2 3JS (tel: 01534 482089), or e-mail: mcstand@focalcd.com


Danish Fortification Society, Bunkermuseum Hansholm, Tarmvej 23, Postbox 102, 7730 Hansholm, Denmark.

Forts Society Group, Bernard C. Lowry, 20 Westfield Road, Clitheroe, Lancashire BB7 2EG (tel: 01254 456873).

Fortress Study Group, Bernard C. Lowry, Elm Tree Garden, Shrewsbury TF1 1LL (tel: 01630 633 433). (The group has a worldwide membership.)

Guernsey Museum and Art Gallery, Cante Gardens, St Peter Port, Guernsey GY1 1UG (tel: 01481 726518).

Historic Fortifications Network, Kent Tourism (tel: 01622 696165, e-mail tourism@kent.gov.uk, web: www.ltemuseum.net).


Librairie Histoire & Fortifications, 8 rue de Crussol, 75011 Paris, France (tel: 0148 651039, e-mail: www.histoire-fortifications.com).

Société Jersiaise, 7 Pier Road, St Helier, Jersey JE2 4XW (01534 58314).

Appendix II – Museums

A selection of museums which tell part of the story of the Atlantic Wall.

Norway

MKB Fjell, Fælledbro near Bergen. A museum on the site of a former bunker complex.

Austrått Fort, Orland near Trondheim. Restored gun battery and museum.

Steigen Battery Dietr., Steigen. Museum on site of the former battery.

Kristiansand Kanonmuseum, Mysvik. Houses only remaining 38cm gun of World War 2.

There are also the Army Museum/Home Front Museum in the Archbishop's Palace in Trondheim, the Kristiansan Fort and the Hegra Fort, built to protect the main approach from Sweden. All have some exhibits to do with aspects of World War 2.

Denmark

Fortification Tirpitz, Blavand. Bunker designed for 38cm gun. Tirpitz-Stillgang, Tane Hedevæ, DK-6837 Blavand (tel: 45 7522 0877).

Appendices

Museums Center, Hansholm. Major museum in 'Fortress Hansholm'. Also 38cm gun emplacement, Batterie Hansholm. Tarmvej og Moeve, 773 Hansholm (tel: 9796 1736).


Museum Langelands, Fort Bagenkop. 15cm guns from Gneisenau.

Stottrup Hesthals, Hesthals. Lighthouse bunker and 10.5cm gun battery position.

Batterie Nord, Frederikshavn. Gun battery position.

Bunker Museum, Silkeborg. German HQ bunker.

Festvold Museum, Scanderborg. German HQ bunker.

Radiostationeng Røbe, Romo. Radar station.

Historicenter, Bleringe. Command bunker for aerodrome.

There are also small, free admission, unattended sites at Bulbjerg (fire control and barracks bunkers); Tylstrup (10.5cm coastal battery position and radar site); Romg (hospital bunker); Dunder (incomplectd 38cm casemate); Odderstrand (AA battery).

The Netherlands

Kroatenslagtergatmuseum, Fort aan de Hoek van Holland. Located in an old Dutch armour museum, with many Atlantic Wall related items.

Stichting 1939-1945, Sinseskerke. A private museum with a large collection of military equipment and Atlantic Wall related items.

Belgium

Atlantic Wall Museum, Dompnier Raverside, Driesstraat 142-8, 8400 Oostende. An open air museum at the location of Batterie Tirpitz.

France

Tourcoing WW1 Museum, 4 bis avenue de la Marine, Tourcoing 59200. Museum in the former HQ Bunker of Fifteenth Army.

Channel Coast

Musée de la guerre, Calais. A museum in a mid-town bunker (in the St Pierre Park opposite town hall).

Musée de la Mer de l'Atlantique, Audinghen 62179. Batterie Todt museum.

Le Blockhaus d'Eperlecques, 62910. Large bunker built to launch V-2 rockets.

La Copule, Wimereux. Large dome-shaped bunker built to launch V-2 rockets.

Musée de la Batterie de Merville, Merville. Museum on the site of the Merville Battery.

* There is also a 3945 Route association* which gives special prices at the four French and one Belgian museum starred above, plus museums at Amblesende CD 940 62164 (World
Bibliography


Blumenrütli, Günther, Von Rundstedt, the Soldier and the Man, Oldhams Press, 1982.


Girrini, Michael, *The Organisation Todt and the Fortress Engineers in the Channel Islands*, Clos (Jersey), 1994


