

REPORT NO. 41
HISTORICAL SECTION (G.S.)
ARMY HEADQUARTERS

20 Jul 51

The German Defences in the Courseulles-
St. Aubin Area of the Normandy Coast

Information from German Sources

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APPENDICES

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GERMAN PERSONAL NAMES

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ABBREVIATIONS

American

G.M.D.S. German Military Documents Section

O.C.M.H. Office of the Chief of Military History

F.S.B. Foreign Studies Branch

German

O.B. Oberbefehlshaber
 Commander-in-Chief

OKW Oberkommando der Wehrmacht
 Armed Forces High Command

OKH Oberkommando des Heeres
 Army High Command

WFSt Wehrmachtsfuehrungsstab
 Armed Forces Operations Staff

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1. A general outline of the German anti-invasion measures in the West in 1943 and 1944 has been supplied in Historical Section [Report No. 40](#), German Defence Preparations in the West. The successive steps from mere coast watching to the orders for creating an Atlantic Wall have been described in Historical Section [Report No. 36](#), The Development of the German Defences in The Dieppe Sector, 1940 - 1942. Within the limitations arising from the dearth of original source material, the present report sets forth the development and the status on 6 Jun 44 of the German defences in the Caen sector in general, and the assault sector of 3 Cdn Inf Div in particular.

2. With the German Navy and Air Force virtually eliminated and the German economic and manpower resources dwindling ever more, Hitler's plan of making thousands of coastal miles invasion-proof was bound to fail. With not enough to go around of anything but propaganda, German defence preparations had been centred in the strategically most tempting coastal areas, while others had

been more or less neglected. To the credit of Allied planners the assault was launched against one of the less well built-up sectors.

3. On 6 Jun 44 the immediate defence of the coastal area from Asnelles-sur-Mer (exclusive) to Franceville-la-Plage (inclusive) (east of the mouth of the River Orne) was the responsibility of the 716th German Infantry Division (static). The divisional area was designated "Coastal Defence Sector Caen"; Divisional Headquarters were at Caen. While some minor elements of 21 Pz Div were in the sector and under command of 716 Inf Div, some minor elements of 716 Inf Div were in the sector to the left under command of 352 Inf Div. The neighbour on the right was 711 Inf Div.

4. Roughly speaking the Canadian front of assault extended from Vaux (inclusive) to St. Aubin (inclusive). The infantry opposition encountered on 6 Jun was furnished in the main by 2 Bn 736 Inf Regt of 716 Inf Div. It required very great fortitude to attack the strongly entrenched defenders, but even more formidable opposition was encountered later when the German armoured reserves were brought into play. The present report deals only with the origin and development of the defences encountered in the initial phase.

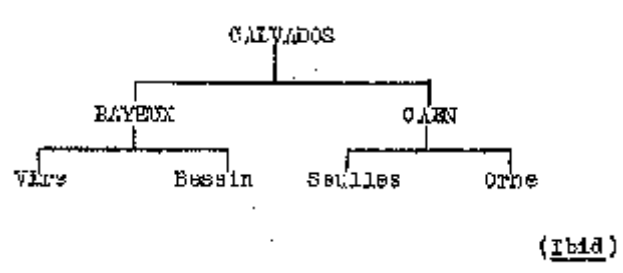
5. The original source material has been lent to Hist Sec (G.S.) by the United States Department of the Army, The Adjutant General's Office, German Military Documents Section, Washington, D.C. Additional information has been adduced from some of the studies which were prepared after the conclusion of the Second World War by German senior officers for the United States

6. In all cases where a reproduction of the source document is being permanently retained by Hist Sec (G.S.), the first reference to the document is followed by the Hist Sec (G.S.) Master Index Number.

EARLY DEVELOPMENTS (1941 - 1942)

7. 716 Inf Div was organized at the beginning of May 1941. At the end of the month it moved into training quarters in the Rouen area. Late in June the Division was quartered in the Coutance - St. Lô area; on 17 Jul it was dispatched to the west coast of the Cherbourg peninsula to protect the Lessay - Barneville sector. In November it moved inland for guard duties, in January it was Fifteenth Army Reserve, in February it underwent training in the Charleroi region, in the latter part of March it moved to the Caen - Carentan area of Normandy (G.M.D.S. - 24183/1, 716 Inf Div, W.D. 1 May 41 to 31 Oct 42). In this area the formation remained on coast defence duty until March 1944, when it was concentrated in the Caen sector, and virtually destroyed there on 6 Jun 44.

8. On 20 Mar 42 the Division assumed command of the 90-km-wide Carentan - Caen sector. It relieved 323 Inf Div, which was moving to the Eastern front (ibid). The divisional sector was known as Coast Defence Sector "Calvados". The left portion was Coast Defence Group "Bayeux", the right one Coast Defence Group "Caen". Group Bayeux was divided into Sub-Group "Seulles" (left) and "Orne" (right):



9. From the time of its organization until 1 Apr 43, the Division was commanded by Lt Gen Matterstock; his successor was Maj Gen (later Lt Gen) Wilhelm Richter (para 17 below). Next higher in the chain of command in Normandy was Higher Command 60 at St. Lô. On 28 May 42 Higher Command 60 was enlarged and upgraded to Headquarters 84 Inf Corps.¹ This Corps (and with it 716 Inf Div) passed under the command of Seventh Army on 15 May 42 (ibid). From then on till well after the invasion, the right boundary of 716 Inf Div was also the right Corps and Army boundary. A location map of the divisions under Seventh Army on 24 Aug 42 appears in photostatic form as Appendix "A" to the present report (G.M.D.S. - 28680/21, Seventh Army, Reports of Chief Engineer Officer, 1 May - 31 Dec 42) (Photostat 981A7 (D4)).

¹ The headquarters of 84 Inf corps was located at St. Lô until 16 Jun 44.

Commanders:	1942 - 1 Apr 43	Gen Arty Behlendorff (H.C. 60, later 84 Inf Corps)
	1 Apr 43 - 1 Aug 43	Lt Gen Gustav von Zangen (Subsequently Cmdr 87 Inf Corps in Italy)
	1 Apr 43 - 12 Jun 44	Lt Gen (later Gen) Arty Erich Marcks (killed in air attack on 12 Jun 44)

10. The movement of 716 Inf Div to its permanent sector coincided with the intensification of the coast defence preparations demanded by Hitler in Führer Directive No. 40, of 23 Mar 42 (H.S. [Report No. 36](#), op cit, para 37). By the middle of June road blocks had been installed at suitable points, a modest mine-laying programme had been carried out, and several harbour entrances, including that of Courseulles, had been blocked. The troops were working on field fortifications; special work in the sector was carried out by 89 Fortress Engr Bn. On 15 Aug 42 the Division numbered approximately 6000 all ranks and 1600 horses. On 18 Aug orders were given for the creation of a strongpoint to protect the special Air Force equipment (Würzburg and Freya radar equipment) at Douvres. (W.D. 716 Inf Div, op cit)

11. At the Führrer Conference of 13 Aug 42, Hitler had committed himself to the creation of "an impregnable fortress along the Channel and Atlantic coast", the so-called "Atlantic Wall" (H.S. [Report No. 36](#), para 63). On 25 Aug Marshal von Rundstedt (since 8 Mar 42 again C.-in-C. West (O.B.West)), issued his own executive order, Basic Order No. 14, in which he announced the fundamental change in the nature of the coast defence planning and construction (ibid, para 64). By September 716 Inf Div was embarking on what it cautiously called "preparations" for the work to be done in this connection in its own sector² (W.D. 716 Inf div, op cit). All construction work on the

² The files of Seventh Army's Chief Engineer Officer confirm that work on the Atlantic wall was slow in getting under way. Several months were lost in waiting for the blue prints for the serialized mass-production of fixed types. In the fall of 1942 there were about 18,000 workers of the Construction Organization Todt (O.T.) in the Channel Islands, and about 60,000 in the mainland area of Seventh Army [very few in 716 Inf Div sector]. On the mainland at least their number was much too small to cope with the vast programme scheduled. And whilst on one hand the training of the troops began to be neglected for the sake of field fortifications, it became increasingly

Atlantic Wall was graded according to its urgency, and the priority rating of each project determined whether it was to be carried out in the first, second, or a later "wave" of work. In the area of 716 Inf Div, work on the Sub-Group "Orne" (extreme right) was given a rating of first priority; work on the Sub-Group "Vire" (extreme left) a rating of second priority; while "Seulle" and "Bessin" apparently were to be dealt with "in due course."³ (Ibid)

12. At the end of October 1942 (on the basis of an OKH directive of 7 Oct 42, and a Seventh Army order of 25 Oct 42) the Division issued the first in a series of orders for its own transformation by the end of the year into a static (bodenständige) Division⁴ (G.M.D.S. - 39431/2, 716 Inf Div, W.D. 1, Vol I of Apps, Appx 21, 30 Oct 42) (Photostat 981D716(D2)). Such static

difficult to enlist and keep foreign workers for the construction forces proper. As an example of the difficulties encountered, the chief Engineer cites the consequences of the British air raid on Lorient, on 4 Dec 42, when 2000 foreign workers vanished. In addition it was necessary to bring in 1,500 workers for clearing up the debris, so that there was a temporary total loss of 3,500 workers. (Seventh Army, Reports of Chief Engr Offr, op cit)

³ In October 1942 a total of 40 installations in the "Orne" Group received a first priority rating. Of these:

28 were for 716 Inf Div,

2 for the Navy (Naval Signal Bunkers Caen and Riva-Bella), and

10 for the Air Force (at Douvres.

5 for G.A.F. Sigs, and

5 for Flak units).

(W.D. 716 Inf Div, op cit)

⁴ For the purposes of the present report interest attaches primarily to the composition of the Division at the time of invasion. The successive organizational changes from October 1942 to May 1944 are neither fully documented, nor are they being dealt with here. The main components of the Division at the beginning of June 1944 are listed further below (para 32).

divisions were found in many sectors of the Atlantic coast. They had almost no mobility, and their personnel was on the whole of lower category than that of normal combat divisions. Their main advantage was seen in the opportunity they offered to the officers of thinking out in detail every possible course of enemy action, and to the men of becoming intimately acquainted by day and by night with every feature of the ground they were eventually to defend.

13. In December 1942, Lt Gen Matterstock issued a comprehensive and revised "Directive for the Defence of the Coast in the Sector of 716 Inf Div" (G.M.D.S. - 39431/7, 716 Inf Div., W.D. 1, Vol VI of Apps, Coast Defence Documents (Akte "Küstenverteidigung"), Kampfordnung, 20 Dec 42) (Photostat 981D716(D3)). Due to subsequent changes in the organization and the boundaries of the Division, only the broad principles and appreciations in this document have retained significance. After describing for instance the dangers and difficulties of landing operations in the sector, particularly on the coast from Luc to Manvieux, the Division commander stated in summation:

"Major landings in the sector are improbable".

(loc cit, p. 3)

The naval appreciations on which these views must have been based are not on hand, but the available documents and narratives make the conclusion irresistible that this concept remained fundamentally unchanged until the spring of 1944. Lt Gen Max Pemsel, C. of S. Seventh Army from 20 May 43 - 7 Aug 44, writes:

It must be emphasized time and again that the Naval experts considered a landing on the Calvados coast as improbable. Later statements to the contrary are incorrect.

(O.C.M.H., F.S.B., MS B-621, Richter, The Battle of 716 Inf div in Normandy, Appendix: Comments by Lt Gen Pemsel) (981SOM(D97))

14. On the basis of his full knowledge of the events in question, Lt Gen Rudolf Schmetzer, O.B. Wet's Inspector of Fortifications from Aug 40 to Feb 44, and later General of Engineers and Fortresses 12 in the West, has prepared for O.C.M.H. a narrative dealing with the preparation of the Atlantic Wall. In this study he explains why not more attention was paid to the preparation of the Calvados sector:

... In the opinion of the Navy, however, the area east of the mouth of the Vire river was not suitable for this purpose [large-scale landing]. Although the coast northwest and north of Caen offered favourable landing conditions, it was too far away for close co-operation with the forces landed on the east coast of the Cotentin. It appeared out of question that the centre of gravity of a large scale landing would be placed in the area of Caen right from the beginning.

This all the more, as it was impossible that the attacker would have been able to take possession of the important port of Cherbourg within the short time we considered to be of decisive influence on the success of the landing.

... As a jump-off basis for an offensive on the continent, this area had the disadvantage that the invading forces would first have to fight their way across the entire country of France to reach the German border, where they could begin the decisive thrust into Germany. For such an operation, the channel coast further north (south of Boulogne as far as the mouth of the Somme river and the flat and extensive Flemish coast beyond the Scheldt river) was much more favourable besides being suitable for large-scale landings. Therefore they were considered as more immediately endangered.

... The "invasion" sector was the least developed of all the sectors along the channel coast, which were endangered by large-scale landings. The "Artificial Harbour" constructed by the Allies came as a bad surprise. ... As the German authorities had not reckoned with this innovation, could indeed not have expected it [sic], they had underestimated the importance, which the coastal sector near Caen now had gained as a favourable point for such a landing. But this would not have been serious had Org Todt not failed to achieve construction in the time planned.

(O.C.M.H., F.S.B., MS B-668, Schmetzer, Atlantic Wall, Invasion Sector, Jun 42 - Jan 44) (Quoted from Part III)

15. The guiding principles laid down for the divisions right at the coast remained unchanged on the whole from the time they were formulated to the time of the invasion. The general background of 716 Inf Div's defence on 6 Jun 44

can well be read from the main points set forth in the Divisional Directive of 20 Dec 42 (para 13 above):

....

Basic

The task of the Division, and therewith of every unit committed in the sector is:

"Prevention of any enemy landing, and in the event of a successful landing, complete destruction of the enemy force."

The Division stands, fights and conquers on the coast. In the event of any enemy landing operation, no command post and no formation may initiate or order a movement to the rear.

(page 21)

....

Chain of Command

The Division Commander is responsible for the preparation and the carrying out of the defence of the Division's coastal sector. He is the responsible ground commander in his coast defence sector. He includes

and commits individually all who bear arms in his operational zone -- regardless of the branch of the Armed Forces to which they belong. The required work potential of the shore supply services for the naval forces, as well as the preparedness for commitment of the Air Force ground organization, and the flak protection of the air fields, must remain guaranteed, insofar as the forces are not otherwise involved by ground fighting operations. The commanders of the coast defence groups and sub-groups, as well as the commanding officers of the strongpoints and resistance nests are responsible within the limits of their jurisdiction for the preparation and carrying out of the defence of their coastal sectors.⁵ The necessary instructions therefore are received by them from the Division

⁵ Coast Defence Terminology:

Resistance Nest (Widerstandsnest)

A small self-contained defence work

Strongpoint (Stuetzpunkt)

Consists of several Resistance Nests

Group of Strongpoints (Stuetzpunktgruppe)

Consists of several strongpoints with mutual fire support grouped for the defence of a relatively small fortified area under unified command.

Defended Area

Comprises the all-round defence by fortifications of larger and particularly important localities, like U-boat pens, larger ports and estuaries.

Fortress

Certain important harbours designated Fortresses on 19 Jan 44 and 3 Mar 44.

(For greater detail see H.S. [Report No. 36](#), para 43)

Conduct of Operations

The forces in the coastal sector conduct the fighting from field fortification-like or fortress-like installations, the fighting potential of which is considerably increased by the large number of static weapons (anti-landing guns, anti-tank guns, heavy and light machine guns, flamethrowers, heavy and light mortars, etc.).

The shelters and firing positions of the forces committed in the rear areas of the main battle field (local reserves, company headquarters detachments, staffs and sub-sector reserves, artillery batteries and troops, naval and Air Force installations) are to be developed as strongpoints or resistance nests

(Page 22)

By means of constructions and all-round defence, and by allocating suitable strength, and supplies of ammunition and rations, all strongpoints must [be made to] fulfil the requirements for holding out against a superior enemy, even for a considerable time. They must hold the installations entrusted to them as permanent ones (Feste Plaetze) down to the last man.

(Page 23)

Infantry

Inf Reserves: In the event of an enemy landing on the coast, or of parachute and airborne operations in the coastal hinterland, local reserves, company reserves, and sub-sector reserves must intervene on their own initiative as quickly as possible on the basis of the reconnaissance and observation results, without waiting for orders from Regiment or Division. But it is necessary to report to the Regiment and the Division.

The Division's tactical reserves (the available battalions of the regiments, the available batteries, the operational elements of the Air Force, the Navy, etc, which have been made available will, as "operational reserve" conduct a mobile defence of the coastal sector. Should the enemy succeed in setting foot on the mainland, he must be destroyed as quickly as possible, and thrown back into the sea by the operational reserves, in close cooperation with the garrisons of the strongpoints and strongpoint groups, by counter-thrust or counter-attack. The target for the attack is always the enemy's landing place. By conducting the attacks from the flanks he is to be cut off from his landing craft and his sea communications, encircled and then destroyed. To make this possible, simultaneous frontal attack is necessary. After the conclusion of each operation, the main line of resistance -- that is, the coastal strip -- must once more be firmly in the hands of the Division

(Page 24)

Artillery

Task: The objective of the artillery defence is the smashing of the enemy landing operations before they reach the effective zone of our infantry weapons, at latest before the infantry's main line of resistance (the water line at high tide).

Thus the main task consists of:

- a) firing on sea targets;
- b) smashing attempted landings
- c) supporting the infantry in defensive fighting against an enemy force which has landed.

In order to fulfil these tasks the artillery is directed to cooperate with the infantry

(Page 25)

In order to ensure artillery supervision of the threatened coast, an observation area on the coast will be assigned to each battery

(Page 25)

Each battery is equipped to lay barrage fire once. It is prepared to do this by day or by night ...

(Page 26)

Batteries will be prepared for the laying of harassing fire (fire concentrations) on certain points along the coast

(Page 27)

Preparedness

Since skilful screening and taking advantage of poor visibility give the opponent an opportunity for perfect surprise attacks, and since, furthermore, in the future parachute and airborne operations in conjunction with operations on the coast, or independently in the coastal hinterland, are possible, all elements of the Division must be constantly in a state of preparedness; that is, enemy operations must always meet troops and staffs that are ready for defence.

(W.D. 716 Inf Div, Vol VI of Apps, op cit, 20 Dec 42)

DEVELOPMENTS IN 1943

16. According to the handwritten and uninformative Main War Diary of 716 Inf Div, the year 1943 was uneventful and devoted mainly to work on the coast defences. In February Field Marshal von Rundstedt inspected the sector

defences, in April the Corps Commander (Lt-Gen von Zangen) and the Chief Engineer Officer of Seventh Army (Col von Bodecker) made visits.⁶ On 28 Jun a revised edition of the "Directive for the Defence of the Coast in the Sector of 716 Inf Div" (para 13 above) became effective [unavailable; presumably minor changes]. (G.M.D.S. - 39431, W.D. 716 Inf Div, 1 Nov 42 - 32 Dec 43)

17. On 3 Apr 43, Maj-Gen Wilhelm Richter (promoted Lt-Gen on 1 Apr 44) assumed command of the formation.⁷ On 17 Nov, 84 Inf Corps issued orders for the creation of a "Second Position". Following several days of reconnaissance work 716 Inf Div issued a divisional order for work on the second position by the troops, one Eastern battalion, 2200 French Labour Service workers, and civilians.⁸ On 21 Dec the Division numbered 9343 all ranks, an increase of roughly 2500 since 21 Dec 42 (ibid).

⁶ Col von Bodecker recorded that corrosion of the detonator had rendered ineffective about 50% of the 13,400 mines laid in the zone of 716 Inf Div (G.M.D.S. - 36238/25, W.D. Seventh Army, Reports of the Chief Engineer Officer of the Army, June 1943) [This condition existed along the whole coast, and was causing much vexation, loss of time and extra labour]

⁷ Richter was born in 1892. He was a professional soldier. In the early stages of the Second World War he commanded 30 Arty Regt (30 Inf Div), on 21 Sep 41 he was appointed Senior Artillery Commander 35, in Jan and Feb 43 he attended a course for division commanders, on 7 Feb 43 he was appointed Cmdr 4 G.A.F. Div, on 1 Apr 43 he was appointed Cmdr 716 Inf Div. He commanded the Division from 1 Apr 43 - 12 Aug 44, and from 9 Sep 44 - 30 Dec 44. On 10 Jan 45 he was transferred to the Norway Command and placed in charge of 14 G.A.F. Div on 20 Jan 45. (G.M.D.S. - OKH, Personnel Files) (Selected Photostats: 981HC(D52))

⁸ A photostatic copy of that order is being retained by Hist Sec (G.S.). Unfortunately it does not give the location of the contemplated positions, and the remark "after the 2000 workers will have become available" shows how problematical the whole undertaking was. (Photostat 981D716(D4))

18. A schematic Order of Battle of the Division on 1 Dec 43 is being retained in photostatic form (G.M.D.S. 39431/2, Apps to W.D. 716 Inf Div, op cit, folio 62) (Photostat 981D716(D5)). Originally the divisional artillery regiment was 656 Arty Regt. On 18 Dec 43 it was redesignated 716 Arty Regt (ibid, fol 65) (Photostat 981D716(D6)). At the same time the "name" batteries of the Division were assigned numbers:

"Franzisa"	5 Bty 716 Arty Regt (2 Bn)
"Vera"	6 Bty 716 Arty Regt (2 Bn)
"Resi"	7 Bty 716 Arty Regt (2 Bn)
"Brasilia"	8 Bty 716 Arty Regt (3 Bn)
" <u>Graf Waldersee</u> "	10 Bty 716 Arty Regt (3 Bn)

(loc cit)

Although the original order and the date are not available, it is certain that shortly thereafter, in accordance with established practice, and to prevent confusion with another artillery formation, the Divisional Artillery Regiment was redesignated 1716 Arty Regt.

19. According to the December Order of Battle (para 18 above) the Division had only one Anti-Tank Company. Formation of a second one was ordered on 25 Dec 43. It was to consist of three platoons; two platoons with three 7.5 cm A.-Tk guns each, and one platoon with two 8.8 cm a.-Tk guns. (Ibid, fol 67) (Photostat 981D716 (D7))

20. In the absence of suitable Divisional sources, some of the background material to explain the actions and disposition of 716 Inf Div on 6 Jun 44 must be taken from higher level documents. For various reasons (H.S. [Report No. 40](#), paras 62-65, et al) the German defence against the seaborne assault was not eventually carried out as written. But in 1943 the attitude and the work of the coastal divisions were still controlled and shaped by the views of the theatre commander. In Basic Order No. 21, of 26 Feb 43, Marshal von Rundstedt dealt with the presumed intentions of the enemy, and with his own projected counter-moves:

... By means of limited attacks on a broad front the enemy will attempt to deceive us and to make us move our strategical reserves in the wrong direction. With the forces held back he will then attack where it seems to be easy ...

I am resolved to destroy any landed enemy immediately and this with [the assistance of] the concentrated force of the Army Group Reserves. To this end I am placing the Army Group Reserves in such a way that the required concentrations for counter-attack can be formed quickly. The goal must be to drive the enemy into the sea on the very day of the landing ...

(G.M.D.S. - H22/85, O.B.West, Basic Orders for Const Defence, 28 Apr 43, Basic Order No. 21, 26 Feb 43) (Photostat 981CW(D11))

It is safe to assume that the preparations and plans of the Division were attuned to this presumed course of events.

21. While thinking in terms of massive counter-blows with armoured concentrations, Rundstedt at the same time never failed to stress the importance of the critical minutes during which the coastal crust would either hold or crack:

The enemy's moments of weakness occur when with a multitude of individual landing craft, and within the most effective range of all our heavy weapons, he is striving to reach the coast, and at the moment of landing when he has yet little fire power and is moving from the landing craft to the shore ...

During that time he must be weakened by our defences to such a point that he will no longer have the strength to form a beachhead or to fight successfully ...

Every officer and man must know that the fate of an attempted landing is decided within a matter of minutes ...

(G.M.D.S. - OKW/200, O.B. West, Coast Defence, Basic Observations, Basic Observation No. 27, 24 Jul 43) (Photostat 981CW(D12))

22. In view of the eventual bungling of the anti-invasion defence by hesitant commanders, von Rundstedt's earlier instructions are of interest:

... In the case of an attempted landing no one is to wait for orders from higher quarters. Everyone has to act on his own responsibility. Act first; then make certain that the matter has been reported ...

(G.M.D.S. - 75144/1, O.B. West, Basic Orders for Coast Defence, 27 Aug 43) (Photostat 981CW(D40))

23. Analysis of 16 Pz Div's experience at Salerno led to some measure of amplification and evolution of the original guiding principles for the divisions at the coast. In Basic Observation No. 28, of 25 Dec 43, O.B. West directed that all reserves, particularly the local ones, were to be placed there where they would be needed in the first stages of the fighting. He stressed the necessity of preparing for all-round defence, and added:

Special attention is to be paid to just those coastal sectors which are rated as "not threatened by a landing". Today this is no longer so!

(O.B. West, Basic Observations, op cit, 25 Dec 43)

A translation of the document appears as Appendix "B" to the present report.

SITUATION ON 6 JUN 44

General Remarks

24. Little information is on hand on the development in the Caen sector during the first five months of 1944. But this lack of source material is counter-balanced to some extent by the existence of a considerable volume of contemporary and post-war information on the situation in the sector at the time of the invasion. Inevitably some legitimate questions had to remain unanswered, but detailed information is being supplied below on some aspects, while in the case of others the way is shown to supplementary material.⁹

25. In the early part of 1944, Hitler and Rommel were insistent on changing O.B. West's "crust-cushion-hammer" dispositions by moving second line divisions and even small armoured elements into the coastal crust. In the execution of this design, as well as due to the High Command's growing concern for Normandy, the original coast defence sector of 716 Inf Div (Banc de la Madeleine - east of Orne) was reduced by approximately two thirds on 16 Mar 44. 716 Inf Div was now responsible for the "Caen Sector" (Asnelles [excl] - east of Orne), and 352 Inf div for the coastal area from Asnelles to

⁹ For work on this phase it might be well to keep the following at hand:

German Situation Maps

France	28 May 44 (Photostat 981HC(D26))
West	6 Jun 44 (Photostat 981.004(D2))
Seventh Army	5 Jun 44 (Photostat 981A7(D2))
Seventh Army	6 Jun 44 (Photostat 981A7(D3))

German Narratives

Pamsel, Lt-Gen, C. of S. Seventh Army, Invasion Preparations of Seventh Army, Translation (O.C.M.H., F.S.B., MS B-234) (981SOM(D73))

von Criegern, Lt-Col, 84 Inf Corps in Normandy, Part I, 6 - 17 Jun 44, Translation (O.C.M.H., F.S.B., MS B-784) (981SOM(D129))

the Banc de la Madeleine (NNE Carentan). (G.M.D.S. - OKW/1605, Schramm, Developments in the West, 1 Jan - 31 Mar 44, p. 31) (981SOM(D98))

26. The most valuable single source of information on the location of the defence works and disposition of the troops in the Caen Sector on 6 Jun 44 is:

Richter, Wilhelm, Lt Gen, Cmdr 716 Inf Div, The Battle of 716 Inf Div in Normandy (6 Jun - 23 Jun 44) (O.C.M.H., F.S.B., MS B-621) (German and English texts: 981SOM(D97))

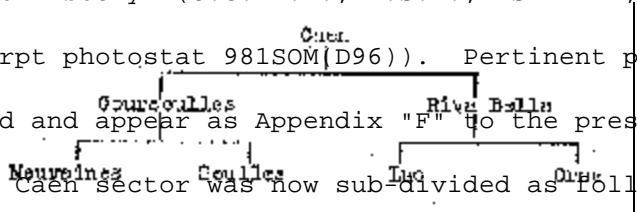
The first part of this study consists of a description of the operations in the area of 716 Inf Div from 6 Jun - 23 Jun 44, the events of 6 Jun being dealt with in great detail. The second part is a copy of the Division's contemporary Operations Report (Gefechtsbericht) for 6 Jun 44. Copies of this detailed report were distributed by A Gp B down to division level "for information and evaluation" (Ops No. 3050/44, of 23 Jun 44). The report consisted of the text and three appendices. All but Appendix 3 appear in Richter's study. Fortunately Appendix 3 was found by G.M.D.S. and carefully preserved with miscellaneous documents of 716 Inf Div. The document has been identified as a map showing in detail the dispositions in the Caen sector at the moment of the assault (G.M.D.S. - 716 Inf Div, Misc Docs) (Photostat 981D716(D*)). A photostatic reproduction of the most immediately interesting part of this map appears as Appendix "C" to the present report (981D716(D9)).¹⁰ The German military symbols shown on the whole map have been reproduced on a trace (enlarged from 1:80,000 to 1:50,000) (981D716(D11)).

¹⁰ See also Appendix "G", introduced in para 33 below

The meaning of the more important German military symbols in the Canadian assault sector on Appendices "C" and "D" can be deduced from the tabulations introduced in para 33 below. Some general information on German military symbols will be found in Appendix "E" to the present report.

State of Defences

27. This subject has been dealt with at some length in the post-war symposium "O.B. West History" (O.C. M.H., F.S.B., MS T-121, appx 2000 pages, pp 397 - 415) (Excerpt photostat 981SOM(D96)). Pertinent parts of the study have been translated and appear as Appendix "F" to the present report.¹¹ Briefly stated, the Caen sector was now sub-divided as follows: (see also Appx "C")



The Sub-Groups Meuvaines and Orne were considered best suited for landing operations, and consequently their defences were more numerous and better prepared than those of the Sub-Groups Seulles and Luc.

¹¹ The sketches in the "Excerpt" were prepared from memory. Where they differ from the information shown in Appendix "C" to the present report, Appendix "C" must be taken to contain the correct and authentic version.

28. Mine-laying in the open sea on the eastern coast of Normandy had been postponed by A Gp B because the Navy even then did not expect a major landing in that sector. Owing to lack of time and heavy seas the mine-belts projected by the Navy had not been installed, chiefly because A Gp B considered the laying of mines along the Channel coast as more urgent. Mines in conjunction with stakes had been installed from 200 - 1200 metres offshore. Due to various difficulties their number and density was less than desired. (Ibid)

29. The preparation of mine-fields and mine-belts on land, as well as the infestation with anti-personnel and anti-tank mines of a strip extending as far as from 300 to 800 metres inland, had almost been completed. The same applied to the preparation of localities, defiles, etc., in the rear of the battle zone. All infantry strong-points, and most battery positions and command posts had been protected by wire obstacles. Only partially completed, however, was the placing of anti-airlanding posts in conjunction with mines and wire-obstacles.¹²(Ibid)

30. The number of fortress-like installations in the strongpoints, mostly casemates and personnel shelters, corresponded with the number and tactical requirements of the defenders. While it is generally believed that the thickness of the steel-bar reinforced concrete walls and roofs of the average permanent installations in the Atlantic Wall was two metres, according to the well-informed source being cited here, the thickness of the walls was in most cases 2.5 metres. (Ibid)

¹² See also: H.S. [Report No. 40](#), para 67 and Appendix "H" (A Gp B, Measures for improving Defences).

31. Regarding the state of the defences in the divisional sector at the time of invasion, Lt-Gen Richter, in his narrative (op cit), made the following statements amongst others:

The fortifications were in no way sufficient to repel the attack of a modern army ...

Two years (1942 and 1943) had been lost during which nothing or just simple field positions had been constructed. Construction of defence works on the coast in the divisional sector was speeded up after the beginning of 1943, but it always occupied second place after Cherbourg. In addition to this, increasing difficulties were encountered from January 1944 on in supplying material, due to the systematic destruction of French railroads and waterways by the enemy air force.

At the beginning of the invasion the construction of fortifications in the division sector was in the following stages:¹³

West of the mouth of the Orne:

Infantry Strongpoints

Courseulles half completed, i.e. West of the mouth of the
Seulles. Riva Bella (Ouistreham) completed.

¹³ "Completed" here means always: Concrete construction completed and filled in, armament installed. (Obstacles, minefields, etc, were always in need of improvements)

Another series of strongpoints, which were next in line to be fortified, were under construction. The majority of the strongpoints were completed in the form of field works, and some of them in the form of reinforced field emplacements (30 cm concrete).

Artillery Positions (Army and Coast Artillery)

Riva Bella battery completed; all others under construction.

Two positions of the Divisional and its attached artillery had been completed in fortress-like construction; the majority was in field positions. ...

What was lacking in the set-up of the defence was depth. The strongpoints and resistance nests, altogether about forty to fifty in the entire division sector, had been placed along the coast-line in the shape of a string of pearls. Some depth was provided by the artillery positions in the field and by the troops quartered in localities which had been prepared for defence. But not all communities were occupied. The air force strongpoint at Douvres, which had been most heavily fortified by the Luftwaffe, resisted until about 15 Jun.

The construction of field positions in depth in the areas between strongpoints had started, as far as I remember, in the following areas:

Meuvaines - Ver-sur-Mer, Reviere - Tailleville, north of la Delivrande, Plumetot - Hermanville-sur-Mer - Colleville - Height 61 [and further east] ...

Since Field Marshal Rommel had arrived the following principles dominated:

The enemy must be beaten on the sea and on the beach. Elements which succeeded in penetrating should become entangled in mine fields many kilometres deep, and airborne troops should get stuck in similar wire and minefields.

In addition to all this, all available immobile weapons should be built in, should cover the beach and the sea, and should be able to observe these directly; they should therefore be placed in the most advanced line or very close behind it, as was for instance the Second Divisional Anti-Tank Company [para 19 above].¹⁴ The Division and the Corps had proposed to locate these anti-tank guns, mortars and heavy machine guns in depth as a support for the defence and counter-attack, as the beach and the sea were within the range of

¹⁴ It can be seen from Appendices "C" and "D" that this anti-tank company (T2/716) was deployed in small parcels close to the coast in the Canadian assault sector. Evidently it was destroyed.

both the well-armed strongpoints and the entire sector artillery. Field Marshal Rommel's idea would have been correct if behind the Division there had been a second and a third one in reserve, able to intensify the barrage on the sea and beach, and at the same time constituting the depth of the defence. The proposal made by the Division and the Corps was turned down. The invasion has shown that these weapons, as well as a number of strongpoints protected by [mere] field works fell victim to the bomber and naval guns without ever really being put into action. (Ibid)

Dispositions of 716 Inf Div

32. The place of 716 Inf Div in the large picture of German dispositions in France appears on the situation maps listed in the footnote to para 24 above. The defence of Normandy and the Cotentin was the task of 84 Inf Corps; 716 Inf Div was on its extreme right.¹⁵ The substance of the Division consisted of

¹⁵ The following large elements of the German Army were in the area of 84 Inf Corps:

Coastal Defence	716 Inf Div 352 Inf Div 709 Inf Div
Coastal Defence, simultaneously A Gp Reserve	243 Inf Div
On Channel Islands	319 Inf Div (reinf)
Army Group, respectively Army Reserves	21 Pz Div 91 Airltdg Div 6 Para Regt
Under Cmdr Repl Trg Army	50 Bde (mobile) 100 Pz Dem and

726 and 736 Gren Regts (with two German and one Eastern battalion each; East 441 with 726; East 642 with 736) and 1716 Arty Regt. At the beginning of June these elements were within from 1 - 2% of their authorized strength (Richter, op cit, Transl, p. 41). On 1 May the ration strength of the Division was 7771 all ranks (ibid, p. 69).¹⁶ The Division had no tanks. (Ibid, p. 41)

33. The location of the organic and attached infantry and artillery elements of 716 Inf Div in the Caen sector on 6 Jun 44 (as shown on Appendices "C" and "D"), as well as that of some of the Division's units deployed in the adjoining sector under the command of 352 Inf Div, is shown in tabulated form on Appendix "G" to the present report. At the beginning of 1944 the Division had organized a second anti-tank company (para 19 above). At that time of invasion, however, the two divisional anti-tank companies had either already been, or were in process of being made part of the Regiments. The two companies therefore may be encountered variously as: T 1/716 or 14/736, and T 2/716 or 14/726. On the situation maps for 6 Jun 44 H.Q. 1 A.-Tk coy 716 Inf Div appears between Periers and Benouville as 14/736, while H.W. 2 A.-Tk Coy 716 Inf Div is shown at Periers (in the Canadian sector) as T 2/716. A multitude of anti-aircraft batteries were stationed in the general vicinity of Caen.

CONCLUSION

Trg Unit

(84 Inf Corps in Normandy, op cit, Transl. pp.4-5)

¹⁶ There are no indications of any substantial changes in strength between that date and 6 Jun 44.

34. Without air and naval support, and with less than eighty, mostly immobile guns, the Caen Division was supposed to defeat the initial assault on a stretch of coast about eighteen miles wide. All considered, the Division put up a good fight. Information from German sources on the fighting in the Caen sector on 6 Jun 44 is being set forth in H.S. Report "The Campaign in Northwest Europe", Part II.

35. This report has been prepared by Capt. A.G. Steiger, Historical Section (G.S.).

for (C.P. Stacey) Colonel
Director
Historical Section (G.S.)

APPENDICES

<u>Appx</u>	<u>H.S. Number</u>	<u>Document</u>	<u>Para</u>
"A"	981A7(D4)	Seventh Army Location Map 24 Aug 42	9
"B"	981CW(D12)	O.B. West Basic Observations No. 28 25 Dec 43	23
"C"	981D716(D)	716 Inf Div 6 Jun 44 Initial Situation (Main Part of Map)	26
"D"	981D716(D11)	716 Inf Div 6 Jun 44 Initial Situation (Main Part of enlarged Trace)	26
"E"	981HC(D57)	Notes on German Military Symbols	26
"F"	981SOM(D96)	Coast Defence Sector Caen 6 Jun 44 State of Defences (Translated Excerpt)	27
"G"	981D716(D12)	716 Inf Div 6 Jun 44 Initial Infantry and Artillery Dispositions (Tabulation)	33

GERMAN PERSONAL NAMES

Ranks and appointments as at time of reference

Behlendorff, Gen Arty, Cmdr H.C. 60, later 84 Inf Corps: 9f

von Bodecker, Col, Chief Engr Offr Seventh Army: 11, 16, 16f

von Criegern, Lt Col: 24f

Hitler, Adolf: 2, 10, 11, 25

Marcks, Erich, Lt Gen (later Gen) Arty, Cmdr 84 Inf Corps: 9f

Matterstock, Lt Gen, Cmdr 716 Inf Div (till 1 Apr 43): 9, 13

Pemsel, Max, Lt Gen, C. of S. Seventh Army: 13, 24f

Richter, Wilhelm, Maj Gen (later Lt Gen), Cmdr 716 Inf Div (from 1 Apr 43):
9, 13, 17, 17f, 26, 31

Rommel, Erwin, Field Marshal, Cmdr A Gp B: 25, 31

von Rundstedt, Gerd, Field Marshal, O.B. West: 11, 16, 20, 21, 22, 23

Schmetzer, Rudolf, Lt Gen (later Gen) Engrs: 14

von Zangen, Gustav, Lt Gen (later Gen) Inf, Cmdr 84 Inf Corps: 9f, 16

GERMAN SOURCES

A. Contemporary Documents

<u>G.M.D.S.</u> <u>Number</u>	<u>Document</u>	<u>Para</u>
H 22/85	O.B. West, Basic Orders (981CW(D11))	20
75144/1	O.B. West, Basic Orders (981CW(D40))	22
OKW/200	O.B. West, Basic Observations (981CW(D12))	21, 23
OKH Personal Files	OKH Personnel Files Selected Photostats 981HC(D52))	17f
OKW/1605	Schramm, Developments in the West (981SOM(D98)) [based on original OKW documentation]	25
28680/21	Seventh Army Reports of Chief Engineer Officer. 1 May - 31 Dec 42	9, 11f
36238/25	Seventh Army Reports of Chief Engineer Officer. June 1943	16f
24183/1	716 Inf Div, W.D. 1 May 41 - 31 Oct 42	7, 8, 9,10, 11, 11f
39431	716 Inf Div, W.D. No. 1 (1 Nov 42 - 31 Dec 43)	16,17
39431/2	716 Inf Div. W.D. No. 1 (26 Nov 42 - 31 Dec 43) [sic] Vol I of Appendices	12, 18, 19
39431/7	716 Inf Div, W.D. No. 1 (26 Nov 42 - 31 Dec 43) [sic] Vol VI of Appendices (December 1942)	13, 15
716 Inf Div Misc Docs	716 Inf Div Initial Situation on 6 Jun 44 (Map)	26

B. Post-War Narratives

<u>H.S.</u> <u>Number</u>	<u>Short Title</u>	<u>Para</u>
981SOM(D97)	Richter 716 Inf Div in Normandy	13, 26, 31, 32
--	Schmetzer Atlantic Wall, Invasion Sector (quoted)	14
981SOM(D73)	Pemsel Seventh Army, Invasion Preparations	24f
981SOM(D129)	von Criegern 84 Corps in Normandy	24, 32f
981SOM(D96)	"O.B. West History" (Excerpt from Symposium)	27, 28, 29, 30

APPENDIX "A"
to H.S. Report No. 41

Seventh Army

Location Map

24 Aug 42

981A7(D4)

Ref: para 9

O.B. West

Basic Observations No. 28

24 Aug 42

981CW(12)

Ref: para 23

C.-in-C. West
(C.-in-C. Army Gp D)
Ops No. 7529/43

-- 2 Appendices --

Basic Observations of C.-in-C. West

No. 28

(Experiences and Conclusions to be drawn from the Landing Operations at Salerno)

I call the attention of all to the attached experiences.

They are, insofar as they are applicable to the conditions of our western front (or the southern coast of France), to be evaluated forthwith, and to be made use of in accordance with their bearing on the defence of the coast and the training of the troops.

In the main these experiences confirm the correctness of our defence principles.

As regards detail, there are additional conclusions to be drawn, which in every case are to be immediately examined on the spot with regard to their practicability, and which are to be carried out on receipt of orders issued by the competent commanders.

I list them below:

- 1) Even before the enemy attack has been identified, preparations for the defensive fighting must be as far advanced as is compatible with their execution.

That is: All reserves, especially local reserves, must fundamentally be on that spot which the Operations Staff has recognized and laid down as being tactically correct for the initial stage of the fighting.

In future, no consideration must be given to comforts of any sort, especially where quarters are concerned! To reconcile these requirements with all other tasks (training of recruits, exercises, position construction, etc) is not always easy; but a way must be found, whereby the question of defence and preparedness for battle is fundamentally the focal point.

- 2.) The expected sustained and massed effect of saturation bombing, heavy and heaviest naval artillery fire, attacks by low-flying aircraft with aircraft weapons, etc, no longer permit the quartering of complete units in villages and towns, at least not within the entire coastal battle area. And furthermore all railway junctions, traffic intersections, larger settled localities, parade grounds, and above all, barracks, are most gravely threatened by air attack, and this includes the rear areas of the security zone. These facts are to be taken into account at once, and in every possible way by the Army Commanders and Military Governors

when making arrangements for quartering and air protection measures. In the coastal zone the reserves are to be placed:

- a) In accordance with tactical needs, and making full use of the terrain.

 - b) In addition, by using all possible improvised cover and all natural cover (shelter trenches, foxholes, tunnels, etc), to provide shelter, whereby attention is to be paid everywhere to the smaller shelters, so that, firstly, the alarm may go into effect with the utmost speed, and secondly, so that heavier losses due to massed quartering, may be avoided. In this, camouflage, which is so indispensable, plays a decisive part.
- 3.) Within the confines of the prospective battle area (field of battle), there must be no heavy weapon, no vehicle, above all no armoured vehicle or other mechanized vehicle, which has not been dug in, or at least provided with splinter-proof protection and camouflage suited to the locality and terrain.
- 4.) There must be abundant alternative positions and dummy installations. No trouble must be spared now which later may save casualties.
- 5.) In the rear areas of the field of battle armour-piercing weapons must be built in and camouflaged in readiness in such a way that even after the

heaviest bombing and gunfire they may still remain intact at the moment of their intervention in the fighting.

- 6.) There must be no artillery which is not built in! This also applies to the divisional artillery, which is not at first committed, but which on commitment must immediately dig itself in. Here alternative firing positions must be especially abundant! Before all else, and everywhere, foxholes.
- 7.) Major movements only out of sight or by night! Always in open order! Special attention must be given to practising these.
- 8.) The enemy's weakness lies, as has so often been emphasized, in the moment of landing. At this time he is particularly exposed to the effects of our weapons! His tactical staff work is heavily handicapped at this moment. The principle remains the same as before -- that of smashing the enemy offensive before the landing takes place. Our artillery which is not visible from the sea should not open fire until such time as the effect will be worth while, so as to achieve the greatest possible effect without loss to ourselves.
- 9.) The goal to be striven for is that of keeping the coastal rim without gaps under interlocking fire from all weapons, especially low-trajectory and flanking fire.

10.) The value of field fortification has been proved once more. It is and will remain the core of the entire defence; permanent installations are only the framework!

11.) Materiel which can be taken from the combat zone for use in field fortification must be taken. Houses, walls, etc which interfere with defence must be demolished. We can suffer no inhabitants etc to remain in the zones probably to be included in the combat area. They only hinder the proper conduct of battle and cause confusion.

I shall request the necessary authority from OKW/WFSt to carry out the requisite measures.

There must be only one authority in the entire combat zone: that of the responsible ground commander!

12.) All supply traffic must take place under cover of darkness only. By day highways and roads must be empty.

13.) Special attention is again to be paid to just those coastal sectors which are rated as "not threatened by a landing". Today this no longer so! At precisely such places the enemy will attempt to penetrate our coastal defence with specially trained troops, to encircle strongpoints from the rear, and thereby to cut out a section of the main line of resistance.

The entire defence system of the main line of resistance must be prepared to engage the enemy also towards the rear -- and be fully developed, that is, for all round defence.

Again I remind you to create a certain arms and ammunition reserve, in order to allow for casualties and replacements, and still remain battleworthy and able to engage the enemy in all directions.

- 14.) Each individual resistance nest, each strongpoint, each strongpoint group, etc, must hold out to the last on its own! Only thus will the enemy be forced to engage in isolated operations, to split up his forces, to reduce his striking power -- when he can be attacked and thrown back by our reserves.
- 15.) The special anti-tank close combat weapons (bazookas etc) are to be distributed and employed in such a way that they will be used, not by the main body of troops in front, but by the local reserves, and there again in the terrain threatened by tanks.
- 16.) In any event, the failure of the normal methods of communication (telephones -- even cable telephones) is to be reckoned with. Besides the radio the motor cycle messenger (cycle messenger) will play a preponderant part in relaying messages. To the forefront the messenger! By the installation of advanced messenger centres, by the preparation of concealed shelters for motor cycle messengers and cycle messengers, this

is to be considered in every way. Tactical Staffs are completely dependent on this!

I am positive that during these weeks before the decision, the utmost will be required from every individual -- leaders and men. They will do their utmost, when they realize the purpose! Indefatigable instruction, full understanding of the magnitude and scope of the approaching decision, and an iron determination, are the pre-requisites herefor.

C.-in-C. West

von RUNDSTEDT

General Field Marshal

Special distribution

"Defence West"

Note: Appendices 1 and 2 are an analysis of 16 Pz Div's defence operations at Salerno.

716 Inf Div

6 Jun 44

Initial Situation

(Map)

Ref: para 26

716 Inf Div

6 Jun 44

Initial Situation

(Enlarged Trace of Map Symbols)

Ref: para 26

Notes on German Military Symbols

981HC (D57)

Ref: para 26

Notes on German Military Symbols

The German system consisted of a number of basic and supplementary signs, which were combined to indicate various headquarters, units, weapons and equipment. There were thousands of possible combinations conveying to the initiated at a glance a multitude of organizational and technical facts.

With the progress of the war, however, the number of facts which could be, and in the opinion of zealous staff officers, had to be explained by symbols, reached such proportions, that it became imperative to simplify the system.

Revisions and amendments were issued, but due to the human inclination to resist change, and the progressive replacement of highly-trained by less proficient personnel, what had been crystal-clear and logical became confused and vague in practice at some lower levels.

In addition to all this the flexibility of the system made it possible for individual units to use perfectly intelligible symbols of their own design. While this was useful at the time, it complicates the post-war study of some documents.

A great number of the symbols encountered on German maps and tables of organization may be explained from information in the volume: "German Military Symbols", Military Intelligence Division, War Department, Washington, D.C., 1

Apr 44. A simple key to the composition of basic signs for weapons and equipment was issued late in 1942 (G.M.D.S. - OKH, H21/141, Particulars for the Führer Atlas) (Photostat and Translation 981HC (D57)). This document is shown here in three parts:

- a) Photostat of German original
- b) Overlay numbering rectangles on original
- c) Translation of text in rectangles

APPENDIX "E" Parts a and b

APPENDIX "E" Part c

Translation of Text in Rectangles

Rectangle No.	Translation
1	Appendix 2 to: Armed Forces High Command, General of Engineers and Fortresses, No. 8225/42, secret
2	BASIC SYMBOLS:
3	Machine Gun light heavy
4	heavy
5	Anti-Tank Rifle
6	Flame Thrower
7	Mortar
8	Infantry Gun
9	Anti-Tank Gun
10	Anti-Aircraft Gun
11	Gun (cannon)
12	Howitzer (light and medium)
13	Howitzer (heavy; 210 mm and larger)
14	Smoke Projector
15	Restricted!
16	Tank
17	Assault Gun
18	Armoured Personnel Carrier (light or heavy)
19	General purpose car [lighter than jeep]
20	Armoured Scout Car (light or heavy)

21 Searchlight

22 Balloon Barrage

23 SYMBOLS FOR TYPES (with examples):

24 Methods of Transport

25 Towed (tractor-drawn)
e.g. tractor-drawn anti-aircraft gun

26 Self-propelled
e.g. howitzer on self-propelled mount

27 Skis

28 Sleighs

29 Railway
Basic symbol with E on right
e.g. Flak on railroad

30 Mountain

31 Basic Symbol for Mountain
e.g. Mountain Infantry Guns

32 Tanks

33 Type and Company designation, also additional symbols
inside basic symbol

34 Tank Mark IV

35 Light Tank Company
light

36 Armoured Command Car
symbol for armoured command car

37 In Position

38 Anti-Tank Gun in Position

39 Fixed (permanent)

40 Gun [in fixed position]

41 Under armour or concrete
under construction -- finished
e.g. lt or med how under construction -- finished

42 Headquarters

43 Headquarters of an Anti-Tank Battalion

44 Headquarters of an Artillery Battalion

45 EXPLANATIONS:

46 Abbreviations

47 On right of number of unit in brackets, Branch of Armed Forces by initial or colour:

H or in black - Army
M or in blue - Navy
L or in green - Air Force

48 On right of symbols

b - Belgian	n - Norwegian
d - Danish	ö - Austrian
e - English	p - Polish
f - French	r - Russian
h - Dutch	t - Czech
j - Yugoslav	

49 On left of symbols
(except tanks)
le - light m - medium s - heavy

50 On right of calibre or
number
k - short)
l - long) length of barrel having same calibre

51 Calibre

52 Number on left of symbol

53 Number of weapons

54 Range

55 Number of kms
over the symbol

56 Barrage Bty

57 Sp on left [Sp : Sperr - Barrage]
under calibre

58 Home Flak Bty

59 Hei on right
under origin [Hei : Heimat - homeland]

60 Alert Flak

61 A1 on right
under origin [A1 : Alarm]

62 Vehicles

63 Number under
the symbol

64 Number under Weapons of same nature but different
the symbol calibre within a unit can be identified by
showing the numbers side by side connected
by a "plus" sign; beginning from the left
with the number of weapons of larger
calibre.
Examples: 2 hy and 6 lt
 2 + 6 - inf guns
 3 hy and
 3 + 0 + 6 - 6 lt motors

65 EXAMPLES!

66 Hy Gun Bty (self-propelled) Army

20.9		range - 20.9 km
	2/109(H)	number of guns - 3
19.4	f [Army]	calibre - 19.4 cm
	or	origin - French
3	black	[unit - 2/109]

67 Hy
Alert Flak Bty (in position) Air Force

	1/22 (L)	Number of guns - 4
8.8	A1	or calibre - 8.8
	4 [Alarm]	green
		[unit - 1/22]

68 Hy Gun Bty (fixed
under concrete) Navy

56		range - 56 km
	(name) (M)	number of guns - 3
40.6	[Navy]	calibre - 40.6 cm
	or	
3	blue	

69 Pz Gren Bn I/7 with 1 Coy on Armd pers carriers:

(19 Armd pers carriers)

[in detail]

[on right]

One Panzer Grenadier Company on 19 half-tracked scout cars

[Weapons]

4 light and 34 heavy machine guns
3 anti-tank guns (3.7 cm)
3 smoke projectors (7.9 cm)
2 light mortars (8 cm)

[in centre]

Two Panzer Grenadier Companies with weapons as shown

[on left]

One heavy Panzer Grenadier Company with weapons as shown

70 When reporting number of weapons describe as:
 lt
 med
 hy
 v.hy

71 Anti-tank rifles

72 up to 7.9 mm

73 -

74 8 mm and over

75 -

76 Inf guns

77 up to 7.5 cm

78 -

79 7.6 cm and over

80 -

81	Mortars
82	up to 7.9 cm
83	8-11.9 cm
84	12 cm and over
85	-
86	Anti-tk guns
87	up to 3.9 cm
88	4 - 5.9 cm
89	6 - 8.9 cm
90	9 cm and over
91	Smoke projectors
92	up to 10.9 cm
93	11 - 15.9 cm
94	16 - 21.9 cm
95	22 cm and over
96	Guns
97	up to 9.9 cm
98	-
99	21 cm and over
100	21 cm and over
101	Howitzers
102	12.9 cm
103	-
104	13 - 20.9 cm
105	21 cm and over
106	Howitzers

107	-
108	-
109	21 - 24.9 cm
110	25 cm and over
111	Flak
112	up to 3.6 cm
113	3.7 - 5.9 cm
114	6 - 15.9 cm
115	16 cm and over

NOTE: The Volume: "Particulars for the Führer Atlas" (op cit) contained also an extensive compilation of symbols for position construction. This document is being retained by Hist Sec (G.S.) in photostatic form. (981HC(D57))

Coast Defence Sector Caen

6 Jun 44

State of Defences

981SOM(D96)

Ref: para 27

In the light of experiences at Deippe and in other theatres of war, how was the defence sector of a division on the west coast (in this case 716 Div -- Normandy coast, north of Caen) organized for defence (tactically and technically), prepared for active defence operations?

(complied -- using [also] Lt-Gen Richter's writings -- by Lt-Gen Schimpf)

....

B. The Coastal Defence Sector of 716 Division

(KVA Caen)

- 1.) Preparations for passive defence against approaching enemy naval vessels, such as mine-laying in the open sea, were deferred for the time being, as, in the view of the Navy too at this time, a major landing on the coast in eastern Normandy was considered unlikely.

- 2.) From the coast there was little prospect of seriously hindering the transshipment of enemy troops from transports to landing craft if transshipment took place in the dark, or outside the range of the coastal artillery, or under the protection of smoke from the enemy fleet. Only in the case of -- at least temporary -- air superiority,

could a transshipment operation be successfully attacked by fighter-bombers and bombers.

In the sector of 716 Div, the beach was flat on the whole, though not exceptionally wide, and this, in the case of a rising tide, would favour the beaching and putting to sea of landing craft on a wide front, especially in the coastal defence Sub-groups Orne and Meuvanies.

Moreover, the high spots lying directly in front of the beach (Roches de Lion, les Iles de Berieres, Roches de Ver) from the middle of the Divisional Sector for a distance of about 2/5 of the entire front, could, given sufficiently high water conditions, presumably be cleared by landing craft drawing little water.

- 3.) The coastal terrain further inland, in its, on an average, from 6 - 8 km deep battle zone, is open and rolling, with high spots (up to 60 m) and low places, showing much variety, and comparatively densely populated. On the whole, on account of the difficulties of mutual support, not favourable to infantry and artillery defence operations and conduct of war; on the other hand without difficult terrain for tank movements.
- 4.) Favourable prospects for enemy airborne landings in the battle zone appear to be limited to the heights north of Periers and south of Douvres; more favourable however outside the battle zone, in the more open and less densely populated area north-east, south-east and north-west of Caen.

5.) 716 Div with its attached components, which is committed in the coastal defence sector of Caen, cannot -- despite willingness for commitment and sacrifice on the part of its units -- in consequence of the unique nature of its components, its armament, its equipment, its mobility, and the age groups from which its personnel is drawn, be regraded as a fighting division completely fit for a decisive defensive battle.

Composition of the Division:

a.) Infantry: The Division had only two grenadier regiments: 726 and 736 Gren Regts. Of these, the Regimental Staff of 726 Gren Regt with 1 and 3 Bns were not committed in the defence sector of the Division, but as Corps or Army Reserve outside the Division. As replacements were assigned two insufficiently armed and trained so-called "Eastern Battalions" 441 and 642, with personnel not yet fully trained for major fighting, and with their reliability not proven in the West.

b.) Artillery: It was equipped with less effective foreign guns, and with limited ammunition as follows: 716 Div Arty Regt with French 15.5 calibre guns, and the assigned artillery units, 155 Arty Regt (from 21 Pz Div), as well as 989 GHQ Arty Bn, with Russian 10 cm and 12 cm [sic] calibre guns.

c.) Mobility: With the exception of a few components, the operational troops attached to the Division only possessed horse-drawn

transport. This was especially disadvantageous in view of the needed ease of manoeuvre in commitment of the artillery, the engineers and the reserves.

6.) Commitment area:

Notwithstanding the Division's limited fitness for battle as regards composition, fighting strength and armament, it had to be committed in a very wide sector, with a front of about 35 - 40 kms, and in terrain unsuited for defence.

The Coast Defence Sector was subdivided into the Coast Defence Sub-Groups Rivra Bella and courseulles, with the focal point in the Coast Defence Sub-Groups Orne and Meuvaines.

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7.) Technical strengthening of the sector's coast defence potential

a.) Considerations and Planning

With regard to a possible major enemy landing, special tactical significance attached to the outer wings of the divisional sector.

Accordingly the focal points for strengthening the defence potential lay in the coast defence sub-sectors Orne and Meuvaines and their inner points of junction.

Here therefore, above all the fighting potential of the defender had to be maintained as long as possible by prepared technical construction, both against bombers and artillery fire and against direct attack. At the same time, in the rear areas of the battle zone too, the technical construction of strongpoints capable of all-round defence, as the framework of the defence zone, had to support the defensive operations against enemy penetrations following a successful landing.

The number and the location of the strongpoints to be built, and the order of priority -- in accordance with the tactical needs -- were dependent on the construction forces and the material available. These fell far short of the quantity desired. The intermediate areas between the strongpoints had therefore to be strengthened very considerably, both frontally and in the rear areas by construction of field fortification type. In addition, all reserves, trains and rear area services had to organize their quarters for all-round defence by constructions of the field-fortification type.

b.) Elaboration:

aa.) Obstacles:

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1.) Mines:

The mine belt which had been projected by the Navy did not materialize, due to lack of time, and to the weather conditions (heavy seas), especially as the mining of the Channel coast (Boulogne, mouth of the Somme) was held by Army Gp B to be of greater tactical urgency.

In this connection attention must be drawn to the significance and promise of this particular type of obstacle to attempted landings; "minefields", in the form of thickly laid shore mines anchored to the tides. They are far less sensitive to bombing or systematically observed artillery fire than land minefields, and can in addition occasion considerable and surprising losses to shallow-draft landing craft.

2.) Stakes:

These obstacles, combined with mines, were installed offshore, at a distance of from 200 - 1200 metres from high or low water line. However, on account of the shortage of material, technical installation difficulties, and insufficient resistance to heavy seas, especially with

an incoming tide, they could not be installed in anything approaching the number desired, either as regards area covered or density.

Land obstacles:

1.) Mining:

Mine belts, mine fields, and scattered mines against infantry and tanks at a distance of from 300 - 800 metres above high water line, almost completed; in addition, in and around settled localities, in defiles, etc, in the rear areas of the battle zone.

2.) Wire obstacles:

Infantry strongpoints were wired continuously; most of the battery positions and command posts had all round wiring.

3.) Staking against airborne landings, combined with mines and wiring, was partly completed.

In consequence of the no longer adequate production capacity, and the situation regarding transport of supplies, a considerable shortage of mines, as well as of wire and other

materials for the construction of obstacles (wood, for example), was much felt everywhere.

b.) Technical developments for maintaining the fighting potential of the troops

The construction of concrete "fortress-like" installations, which, protected by obstacles all round, were treated collectively in the concepts "strongpoints" and "strongpoint groups" (several strongpoints under unified tactical command), served this end.

The concrete installations were developed in accordance with the use to which they would be put:

Either "combat posts", i.e. those installations from which weapons operated through embrasures; or "shelters", i.e. those installations which merely served as bombproof shelters for the troops until such time as they were committed in open firing positions.

The number and type of the concrete installations within the strongpoint was in proportion to the intended garrison and the tactical needs. The construction strength of the "fortress-like" installations in general corresponded to 2.5 metres of steel-reinforced concrete.

c.) Technical development of signals

aa.) Fortress cable (from 2-3 metres underground) was laid:

1.) From the Division to the regimental combat posts, and for the most part also to the battalion combat posts and to the artillery groups.

2.) Along the coast, to connect the battalion sectors (coastal defence sub-groups) with one another, with a connection to the main strongpoints.

bb.) Open telephone wires along the ground were provided with numerous branch connections in such a way that contact with every strongpoint and every artillery firing position was possible.

cc.) Telephone and road communication from the Division to the regimental combat posts; thence to the battalions and companies.

dd.) Carrier pigeon communication available to some extent in the main strongpoints and the strongpoint groups.

The artillery signals network installed in accordance with its own needs.

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716 Inf Div

6 Jun 44

Initial Infantry and Artillery Dispositions

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