

The WW II German Coastal Artillery Battery *H.K.B.*1274/*StP C*342 at Camaret sur Mer (Finistère—FR)

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Abstract

In previous articles dedicated to various German military structures of the Atlantic Wall in West Brittany, the preservation state and the organization of their components have been analyzed. The components have generally been found in a good preservation state without damages due to combats or bombardments. This is not the case of the components of the German coastal artillery battery *HKB*1274/*StP C*342 described in this article. The article shows also the organization of the battery, how it integrated pre-existing French military structures and how a massive allied air bombardment affected it.

Keywords

*H.K.B.*1274, *StP C*342, German, Coastal, Battery, Atlantic Wall, Finistère, Goulet, Brest, France

1. Introduction

The necessity to defend the sea entrance or Goulet to the port of Brest (France) against enemy intrusions already emerged during the last French Religion War, on Mars 1594, when Spanish troops occupied the peninsula of Roscanvel, on the south side of the Goulet, and erected a fort for cutting sea supplies to Brest under siege. It was necessary for the French, a harsh siege one month long, up to November 1594, to defeat the Spanish garrison barricaded in the fort. The necessity emerged much more strongly from 1631, year in which the first minister of King Louis XIII cardinal Richelieu decided to create an important base for the French Royal Fleet in Brest. The Goulet was then defended by artillery batteries constructed along its coasts in the period 1670-1680 under the direction of the minister of the Fleet Colbert.

The marshal of France Vauban, under King Louis XIV, disposed the construc-

tion of strongholds along the Goulet coasts which in case of attack could be supported by regular troups stationed in the interior lands. Because the gulf of Camaret sur Mer, on the south side of the Goulet, represented an ideal place for foreign troupes landing, he disposed the construction of a fortress in the port of Camaret, just in time, during the French-Spanish war, on 18th June 1694, for rejecting the landing of a British-Dutch invasion force on the nearby Trez-Rouz beach, named after that "British Death".

The Goulet, near Camaret, was objet of further defensive constructions, consisting on the Petit Gouin pointe: on 1813 an artillery battery, on 1859 a crenelated guardhouse of 2nd type, mod. 1846 (40 soldiers and 8 guns) as part of a 1846 - 1862 protection program of the French coasts and, at the end of 19th century, two artillery batteries, named respectively as "High", armed with four 95 mm guns, and "Low", armed with small calibre guns, and on the Grand Gouin pointe a mortar battery located in an unknown position (Glad Patrimoine de Bretagne 2002a; Glad Patrimoine de Bretagne 2006a; Glad Patrimoine de Bretagne 2006b; Truttmann 1975).

2. The Goulet Mound German Defences

In order to improve the defences of the Goulet, during the period of the Occupation 1940-1944 the German Kriegsmarine (War Fleet) constructed, among other on the northern side of the Goulet mound near the pointe Saint Mathieu, the M.K.B. "Holtzendorf", 1/M.A.A 262/Stp. Re 305 (Marine Kuste Batterie, 1/Marine Artillerie Abteilung 262/Stützpunkt Re305-Navy Coastal Battery, 1/Marine Artillery Division 262/Support Point Renan 305) armed with 4 x 150 mm guns under SK (Sonder Konstruction - Special Construction) bunkers (Tomezzoli, 2015) and the M.K.B. "Graf Spee", 5/M.A.A. 262/Re 503 armed with 4×280 mm S.K. L/40 guns, 3 in open gun emplacements and 1 under SK bunker (Glad Patrimoine de Bretagne, 2005). On the southern side, the German Heer (Army) constructed near Camaret the H.K.B.1274/StP C342 (Heer Kuste Batterie 1274/Stutzpunkt C342-Army Coastal Battery 1274/Support Point Camaret 342) (Figure 1) comprising 2×7.5 cm C/97 guns each under bunker M670 on the Petit Gouin pointe and 4×220 mm K532 long range guns in open gun emplacements on the Grand Gouin pointe (Glad Patrimoine de Bretagne 2002b; Rapport Pinczon du Sel, 1947-1948).

Because no allied sea attack came, like that of 25th August1944 by *HMS Warspite* on *M.K.B. "Graf Spee"*, *H.K.B.*1274 did not operate actively for the defence of the Goulet.

However, it was object of a massive allied bombardment (**Figure 2**). When this took place is not completely clear (Florentin, 2008). However, it probably took place on 3^{rd} September 1944 during Mission 601 against the Crozon peninsula, by 393 *B*17 of the 8^{th} *USAAF* 3^{rd} *BD* (Bomber Division) supported by 15 *P*51 and 49 *P*38 of the 8^{th} *USAF FC* (Fighter Command).

The bombardment report (Bohn, 1998) indicates raids on the following objectives:

1) Brest and peninsula: 09:36 - 10:58, bombs: 1203×500 lb GP (General Pur-



Figure 1. *H.K.B.* 1274-PG Petit Gouin pointe; GG Grand Gouin pointe; (1) platform and barrack; (2) 2×2 cm *Flak* gun 30 emplacements; (3) reflector emplacement; (4) 1st open gun emplacement; (5) bombarded areas; (6) square emplacement; (7) 2^{nd} open gun emplacement; (8) latrine; (9) observatory bunker; (10) destroyed 3^{rd} open gun emplacement; (11) destroyed 5 \times C9 75 mm gun emplacements; (12) destroyed 4^{th} open gun emplacement; (13) $3 \times$ possible French concrete, joined barracks; (14) *H*622 and *H*638 bunkers; (15) *H*641 bunker; (16) security perimeter: metal barrier and *tobrucks*; (17) minefields; (18) Camaret sur Mer [GeoPortail].

pose), 4771×100 lb GP, 1480×500 lb SAP (Semi-Armor Piercing), 999×260 lb fragmentation, tot. 1037.9 tons delivered, 2 planes lost, 13 damaged;

2) Crozon-Kerret: 10:37 - 10:40, covered by explosions during two attack waves; 3) Kerloc'h: 10:10 - 10:51, military position, 15 explosions on the target site, 65 on the N-W beach, 60 on the nearby fields, 35 bombs on the Kerloc'h bridge (HSO 10:15); 4) Kérinel: 10:18, 10:28 - 10:43, military position, 60 explo-



Figure 2. Mission 601 bombardment of *H.K.B.* 1274-C0417-0301_1951_CDP3760_0984, n°984, 1/5154, 27/07/1951 [GeoPortail].

sions, some small boat touched;

5) Crozon: 10:22, 10:22 - 10:32, military position, about 15 explosions on the zone; 6) Kerguillo: 09:42 - 09:58, 10:21, military position, about 20 explosions on the S-W side of the zone, other explosions at the E-N-W of the position, 25 on the beach 3500 m from the target; 7) Telgruc and Penquer le Craon: HSO: 09:36, 10:16 - 10.18 defended positions, $60 \times \text{GI}$, $25 \times FFI$ (French Forces of the Interior) and $25 \times \text{civilians killed}$; 8) Brest-Pont Scorff : 10:15 - 10:18, coastal battery, about 75 explosions; 9) Brest-Tregoudan: 10:20 - 10:47, coastal battery, 50 explosions outside the target zone;

10) Brest-pointe des Espagnols: 10:22 - 10:23, heavy coastal battery and torpedo battery, some bombs fallen into the sea;

11) Camaret-Fort de Quélern: 10:26, about 15 bombs touched the Fort; 12) Lanvéoc-Poulmic: 10:03, 10:09, 10:10, 10:27, defended position, about 100 explosions inside 50 - 100 m from the target, other at 300 m from the target; 13) Morgat: 10:26, 10:58, 11:00, artillery battery, at least 100 bombs on the target.

Because no German heavy coastal battery existed on the pointe des Espagnols (10), the only heavy coastal battery bombarded was surely H.K.B.1274, only 4 km away.

The bombardment of H.K.B.1274 (Figure 2) was successful. Many of its components on the Grand Gouin pointe were completely destroyed or seriously damaged. The components on the Petit Gouin pointe, protected by a cliff or intentionally left aside, escaped the bombardment.

The visit of the *H.K.B.*1274 site took place on 27th December 2016.

3. Petit Gouin Components

The H.K.B.1274 components identified on the Petit Gouin (Small White) pointe (Figure 3) were the followings.

A 1st R670 (48°17'08.52"N, 04°36'03.76"W) (Figure 4) for 7.5 cm C/97 Schneider gun. It presented a well preserved concrete structure decorated by contemporary, coloured graffiti, without damages due to the bombardment or combats. The narrow rear aperture of the fire room close to the cliff suggested that the hosted gun was detached from its mobile carriage, introduced into the fire room through its front aperture and mounted on a support anchored to fixing bolts in a square aperture on the floor of the room. The fire room was empty,



Figure 3. Petit Gouin pointe (1) access pathway, (2) 1st R670, (3) 1st barrack, (4) 2nd barrack, (5) concrete platform, (6) 2nd R670, (7) French crenelated guardhouse, (8) 1st 2cm Flak gun 30 emplacement, (9) connection trench (10) 2nd Flak gun 30 emplacement, (11) pathway to the Grand Gouin pointe [GeoPortail].









(d)

(e)

Figure 4. 1^{st} *R*670 (a) view from the 2^{nd} *R*670, on the left 1^{st} barrack, on the foreground Camaret sur Mer; (b) front side with with splinter guards, on the top left the French crenelated guardhouse of 1859; (c) rear side with entrance to the fire room close to the cliff; (d) ammunition room; (e) combat gas extraction system room.

deprived of its original furniture and decorated by coloured graffiti. On the walls, no traces of a thermal insulation system. The fire room and the combat gas extraction system room preserved some rusted portion of conduits. The metallic ceiling preserved two joints for the gun lifting and the grids of the combat gas extraction system.

A 1st barrack (48°17' 08.86" N, 04°36' 03.54" W) (Figure 5), close to the 1st R670, about 4 × 8 m. It was partially buried in the terrain. Its emerging, concrete structure was well preserved without damages due to the bombardment or combats. Two windows, opened towards the cliff, provided light to an internal, single room preserving its probably original wall pale, ochre painting, covered by contemporary, coloured graffiti, and ceiling white painting. On the ceiling a chimney hole confirmed that it was habitable, notwithstanding the absence of a latrine and traces of electrical elements. Probably it was used as guardhouse. All the original furniture disappeared and the room was partially filled with terrain fell from the cliff through the windows. The traces of the formwork elements visible on the external walls, typical of the German masonry, confirmed that it was of German construction.

A 2^{nd} barrack (**Figure 6**), close to the 1^{st} one, about 4×5 m. It was completely buried in the terrain. Its emerging concrete structure was well preserved without damages due to the bombardment or combats. Two windows, opened towards the cliff, provided light to an internal, single room preserving its probably original wall pale, ochre painting, covered by contemporary, coloured graffiti, and ceiling white painting. The absence of a chimney hole on the ceiling, a kitchen, a latrine and traces of electrical elements confirmed that it was not habitable and probably used as material depot. All the original furniture disappeared and



(a)

(b)



Figure 5. 1st barrack (a) coverage, on the top Trez-Rouz beach "British Death"; (b) entrance; (c) lodging room; (d) chimney hole probably for *Festungshofen* (fortress oven) *WT*80.





Figure 6. 2nd barrack (a) entrance; (b) internal, single room.

the room was partially filled with terrain fell from the cliff through the windows. It too was of German construction.

A 2nd R670 (48°17'10.06"N, 04°36'04.07"W) (Figure 7) for 7.5 cm C/97 Schneider gun, about 40 m north from the 1st one. It presented a well preserved concrete structure decorated by small, contemporary, coloured graffiti, without damages due to the bombardment or combats. It was accessible from the two barracks through a concrete staircase bringing to a concrete platform provided with two fixation bolts positions for gun or projector supports. At the platform end, a corridor entrance brought to the ammunition room, the combat gas extraction system room and the rear side opening of the fire room of the bunker. The fire room was empty, deprived by its original furniture and decorated by coloured graffiti. On the walls, no trace of a thermal insulation system. The fire room and the combat gas extraction system room preserved some rusted portion of conduits. The metallic ceiling preserved two joints for the gun lifting and the grids of the combat gas extraction system. At its end, the corridor further gave access to another barrel vault corridor, probably of French construction, carved into the cliff, having cable supports on the walls. This corridor, folded at 90°, gave access to an empty room about 5×5 m of unknown purpose.

A French crenelated guardhouse $(48^{\circ}17'09.09''N, 04^{\circ}36''05.08''W)$ (Figure 7 (a)), 10×20 m (Dion, 1996). It was closed and not accessible to the public. The underground floor hosted a cistern. The first floor, partially protected by the cliff, comprised an access portal, 4 rooms for lodgements and services of the French garrison and 5 smaller rooms for hosting services, ammunitions and artillery materials. The second floor was the artillery terrace and was covered and rendered habitable in the first half of the 20th century. It comprised an access portal connected to the cliff by a bridge and 8 turrets with louvers (Glad Patrimoine de Bretagne, 2002a).

4. Grand Gouin Components

The *H.K.B.* 1274 components identified on the Grand Gouin (Great White) pointe (Figure 1) were the followings.

A platform (48°17'13.12"N, 04°36'04.47"W) (Figure 8), about 4 m diam. and





(b)



(d)







Figure 7. 2nd *R*670 (a) fire room front side aperture with splinter guards, on the upper left the 1859French crenelated guardhouse; (b) concrete platform with one of the two fixation joints position for a gun or projector support; (c) corridor entrance, on the right exhausted combat gas conduit niche; (d) niches at the bunker entrance; (e) combat gas extraction system room, rusted conduits rests; (f) fire room entrance, metallic ceiling with joint for gun lifting; (g) square gun emplacement with plied fixing bolts; (h) *R*670 plan. 4 ammunition room and combat gas extraction system room, 5 fire room (Rudi, 1998); (i) barrel vault corridor to an empty room of unknown purpose carved into the cliff.

20 cm thick. It preserved an erected part, about 50 cm high, of its original parapet. A collapsed portion along a fracture line crossing its center leaned on the ground masking the platform support. The collapse was due either to a structural failure or to the vibrations induced on the platform by the bombardment. An octagonal incision on its surface confined small triangular incisions probably for the adhesion of a concrete coverage. On the platform, mixed in the concrete, the pebbles of the *Ero Vili* (Tomezzoli & Marzin, 2015) were clearly visible.

A barrack (48°17'12.15"N, 04°36'04.32"W) (Figure 8), about 8×4 m. It presented a well preserved concrete without damages due to the bombardment (Figure 9) or combats. A window provided light to an internal, unpainted, single room, covered by contemporary coloured graffiti. Although achimney hole in the ceiling, a kitchen, a latrine and of traces of electrical elements were absent, its position near the platform suggests that it was used for lodging the personnel in service at the platform. The traces of the formwork elements visible on the external walls confirmed that it was of German construction.

A rectangular component ($48^{\circ}17'12.36''N$, $04^{\circ}36'12.45''W$) (**Figure 8**), about 5 \times 3 m emerged at the ground level. It presented well preserved concrete sides 50 cm thick and its interior was filled by a concrete blocks and terrain. Its purpose is unknown.







Figure 8. Grand Gouin pointe (a) platform, collapsed portion; (b) platform, fracture line and incisions; (c) barrack near the platform; (d) interior single room; (e) rectangular component of unknown purpose, on the left the Goulet mound, in the middle the Grand Gouin pointe.

A 1st 2cm Flak gun 30 emplacement (48°17'09.46"N, 4°36'06.92"W) (Figure 10), 4 m internal diameter, buried in the terrain. It presented an emerging, concrete structure well preserved without damages due to the bombardment or combats. Octagonal in shape, it hosted the entrance on one side and ammunition stores on other four sides. At the centre, well preserved, the ground metallic support for the gun, provided bolt fixation screwed holes.

A 2nd Flak gun 30 emplacement (48°17'10.44"N, 04°36'05.71"W) (Figure 11), similar to the 1st Flak gun 30 emplacement. It presented an emerging, concrete structure well preserved without damages due to the bombardment or combats.







Figure 9. (a)-(c) bomb impact craters, (d), connection trench, in middle left the Grand Gouin pointe.



Figure 10. 1st 2 cm *Flak* gun 30 emplacement (a) entrance and ammunition stores; (b) ground metallic support for the gun.

At the centre, well preserved, was the ground metallic support for the gun, equal to that of the 1st gun 30 emplacement.

A 150 cm parabolic searchlight emplacement ($48^{\circ}17'11.01''N$, $04^{\circ}36'17.4''W$) (**Figure 12**) (Atlantikwall Co UK., 2016), about 5 m internal diameter. It was partially buried in the terrain and presented a well preserved emerging, concrete structure without damages due to the bombardment or combats. Octagonal in shape, it hosted a labyrinth entrance on one side and niches on each other internal sides. In the centre, well preserved, a triangular concrete base with three vertices recesses for the fixation of the projector support legs. Near its en-trance a rectangular, concrete emplacement, about 1.5×2.5 m, emerged from the terrain, possible access to lodging rooms under the emplacement. Leaning against an external side, a garage, 3.50×2.50 m, hosted a searchlight electrical generator



Figure 11. 2nd 2cm *Flak* gun 30 emplacement (a) entrance and ammunition stores; (b) ground metallic support for the gun.







Figure 12. 150 cm search light emplacement (a) labyrinth entrance, on the left electric generator garage, on the right rectangular, concrete emplacement (b) interior with triangular concrete base with three recesses; (c) side niche; (d) electric generator garage.

mounted on a trailer, probably a standard diesel 8 cylinders engine delivering 200 A at 110 V. The search on the terrain for other searchlight emplacements provided no result.

A 1st gun open emplacement (48°17'09.56"N, 04°36'16.86"W) (Figure 13), about 65 m long and 22 m bright. It was an SK construction formed by a concrete, circular gun emplacement, about 10 m diam., emerging at the terrain level, followed by two opposed right and left Vf 51a ammunition bunkers, and two opposed right and left H502 SK and H501 SK crew bunkers. A concrete access way ran along its sides to connect together all these constructions. The gun em-







(b)





(d)







(f)



(h)



(g)



(i)



(1)

(m)



Figure 13. 1st open gun emplacement (a) general view; (b) emplacement structure . 1 circular gun emplacement, 2 emplacement entrance, 3 right V/51a, 4 left V/51a, 5 H502SK, 6 H501SK, 7 right branch of the access way, 8 left branch of the access way, 9 central rampart (Rapport Pinczon du Sel, 1947-1948); (c) circular gun emplacement and left and right V/51a; (d) circular gun emplacement, ammunition niches and rests of the ground gun support, in the middle a bunker R636a; (e) trace of the fixation plates of the rail for turning the gun; (f) fixation plate of the circular rail; (g) central rampart and left and right V/51a, on the concrete walls impact hits of bomb splinters; (h) right V/51a, corridor and opening of the ammunition room; (i) right Vf51a, ammunition room; (j) right Vf51a, ammunition room; (k) left VI51a; (l) H501SK escape conduit; (m) H502SK, disintegrated facade; (n) emplacement entrance and internal court, on the left H502SK, on the right H501SK.

placement preserved eight niches on its internal wall for storing ammunitions and materials and on the floor the trace of the fixation plates of the rail for turning the gun. A trapezoidal fixation plate provided with a bolt at each vertex and two protruding mounting pins was still at its place in the trace. The gun support at the centre of the gun emplacement disappeared. Two broken, concrete, square columns at the entrance of the gun emplacement, each provided with a deep vertical groove on two opposed sides in correspondence with two other vertical grooves on the internal wall of the gun emplacement suggested the gun em-



placement could be isolated from the rest of the emplacement by inserting wooden planks in the grooves. A central rampart separated and protected the two *Vf*51*a* and the *H*501 *SK* and *H*502 *SK*, and the branches of the access way.

The right VI51a was crossed by the access way through its corridor. An entrance in the corridor gave access to a single ammunition room preserving on the walls the original white painting, traces of metallic joints and on the ceiling a rusty metallic cover in some parts detached. A rectangular wall aperture near the entrance allowed the rapid exchange of the ammunitions. All the original room furniture disappeared. The left VI51a was in all similar to the right VI51a and both the two presented a well preserved concrete structure, without damages due to the bombardment or combats. Only the walls protecting the access way branches showed impact hits of bomb splinters. The H501 SK had its entrances obstructed by the vegetation; therefore its interior was not accessible. On its exterior structure, a damaged escape conduit was still recognizable. The H502 SK was hit by a bomb which perforated its coverture by a hole of 2 m diam., devastated its interior, killed the occupants and disintegrated the front facade.

A latrine (48°17'09.21"N, 04°36'21.61"W) (Figure 14), near the cliff, 1.50 x 1.50 m. It presented a well preserved concrete structure, decorated by contemporary, coloured graffiti, without damages due to the bombardment or combats. It served the personnel in service at a nearby observatory and fire direction bunker.

A coastal battery observatory and fire direction bunker (48°17'09.19"N, 04°36'23.54"W) (Figure 15). It presented, with respect to the corresponding standard models *R*636, *R*636a (Figure 15(m)), the presence of a concrete, uncovered observation post for one soldier armed with a machine gun at the rear side near its entrance and the absence of an upper covered rangefinder observatory on its coverage. The uncovered, observation post presented a sub-stantially well preserved concrete structure, only part of which lost by a possible constructional failure or by vibrations induced on the post by the bombardment. The upper covered observatory was probably judged not necessary in view of the unobstructed field of view toward the sea of its observation room or the possible attempt of simplify the architecture and saving material. A bomb hit the dome coverage of the observation room. The dome coverage, although damaged (Figure 15(k)), sustained the explosion without however avoiding damages to



Figure 14. Latrine (a) rear side with R636a in the foreground; (b) front side.





(b)





(d)

(e)



(f)







(h)





Figure 15. Coastal battery observatory and fire direction bunker (a) concrete coverage, on the right uncovered lookout post for one soldier; (b) dome coverage of the observation room; (c) rear side, on the right uncovered observation post; (d) uncovered observation post, disappeared concrete coverage; (e) entrance; (f) damaged gas lock, on the left entrance to the computing room, on the right entrance to the close fire room; (g) crew room with painted window probably of origin and contemporary, coloured graffiti; (h) gas lock; (i) damaged computing room; (j) bunker front side; (k) damaged dome coverage of the observation room; (l) external observation post; (m) R636a standard model. 1 gas lock, 2 close fire room, 3 crew room, 20 radio room, 21 heating room, 26 observation room, 27 computing room, 28 communication room, 39 officers room, 66 rangefinder observatory (Rudi, 1998).

the interior of the bunker (Figure 15(f) & Figure 15(i)) and the possible killing of the occupants. The observation room and the computing room were invaded by concrete debris and terrain entered from the elongated aperture of the observation room. All the internal rooms were empty, deprived of all their original furniture, sometime decorated by contemporary, coloured graffiti. On the walls no traces of a thermal insulation system. The rooms preserved their rusted me-tallic ceiling and portions of aeration conduits. Outside the bunker, near the observation room, was an external, octagonal observation post for one soldier.

A square emplacement (48°17'07.59"N, 04°36'18.63"W) (Figure 16), about 10 \times 10 m. It was surrounded by 2m high side walls. It presented a damaged concrete structure decorated by contemporary, coloured graffiti. The bombardment demolished part of the wall hosting the entrance and opened deep cracks on the other walls. Leaning against one of its walls, a rectangular emplacement, about 6 \times 5 m, presented part of the wall hosting its entrance demolished and the other walls deformed and broken in pieces.

A 2nd open gun emplacement (48°17'04.35"N, 04°36"17.47"W) (Figure 17), about 65 m long and 28 m bright, similar to the 1st open gun emplacement. It was an SK construction formed by a concrete, circular gun emplacement, about 10 m diam., emerging at the terrain level, two opposed right and left Vf 51a ammunition bunkers and two opposed right and left H502 SK and H501 SK crew bunkers. A concrete access way ran along its sides to connect together these constructions. The gun emplacement preserved eight niches on its internal wall for storing ammunitions and materials and on the floor the trace of the fixation plates of the rail for turning the gun. No fixation plate remained in place. The gun support at the centre of the gun emplacement disappeared. Two concrete, square columns still in place at the entrance of the gun emplacement, each provided with a deep vertical groove on two opposed sides in correspondence with two other vertical grooves on the internal wall of the gun emplacement suggested that the gun emplacement could be isolated from the rest of the emplacement by inserting wooden planks in the grooves. A central rampart separated and protected the two VI51a and the H501 SK and H502 SK, and the branches of the access way. The right and left VI51a were crossed by the access way through their corridors. An entrance in their corridors gave access to a single ammunition room preserving on the walls the original white painting, traces of metallic joints and on the ceiling a rusty metallic cover. A rectangular wall aperture near the entrance allowed the rapid exchange of the ammunitions.



Figure 16. Square emplacement, on the left leaning rectangular emplacement.







(b)

(c)



(d)

(e)



(f)

(g)



Figure 17. 2nd open gun emplacement (a) general view; (b) circular gun emplacement with two concrete, square, columns; (c) circular gun emplacement; (d) bomb craters near the circular gun emplacement; (e) left and right Vf 51a; (f) emplacement entrance; (g) right R501SK with a bomb crater on the upper left (h) R501SK plan. 1 gaslock, 3 crew room (Rudi, 1998); (i) R502SK plan. 1 gaslock, 3 crew room (Rudi, 1998).

All the original room furniture disappeared. Only the walls protecting the access way branches showed impact hits of bomb splinters. The H501SK and H502SK had their entrances obstructed by the vegetation; therefore their interiors were not accessible. The 2nd open gun emplacement substantially escaped the bombardment and presented a well preserved concrete structure decorated by contemporary, coloured graffiti.

A 3rd open gun emplacement (48°17'01.29"N, 04°36"22.4"W) (Figure 18), of the same design of the 1st and 2nd open gun emplacements. It was completely destroyed by the bombardment. Its ruins were covered by terrain and thick vegetation with only some isolated emerging concrete block.

5 × 75 mm C9 gun emplacements (Rapport Pinczon du Sel, 1947-1948), located between the 2nd and 3rd open gun emplacements, were completely destroyed. Their ruins were covered by terrain and thick vegetation with no concrete portion visible.

Three concrete, joined barracks (48°17"06.85"N, 04°36"07.91"W) (Figure 19). They were probably of French construction judging on the accurate finishing of their walls. They hosted, respectively, personnel lodgments and a canteen. They presented well preserved concrete structures with the exception, in one of them, of a wall damaged by the bombardment, through which debris and terrain fell on the rests of a possible kitchen. All the original furniture disappeared. The search on the ground for possible mortar or gun emplacements provided no results.

A H622 and a H638 bunker (48°17'05.45"N, 04°36'12.38"W) (Figure 20) facing each other. The H622, two crew bunker, was buried in the terrain. It presented a facade without damages due to the bombardment or combats. It was accessible. On the walls, no trace of a thermal insulation system. The two crew rooms were empty, deprived by their original furniture. They preserved a rusted metallic ceiling and cot support joints on the walls. The H638, small dressing bunker, was buried in the terrain and not accessible because of the vegetation that covered its facade and obstructed its entrances. Therefore, it was not possi-





Figure 18. 3rd open gun emplacement (a) ruins covered by the vegetation; (b) (c) emerging concrete portions.



Figure 19. Three concrete barracks, probably of French construction (a) entrances of the west and east barrack; (b) east barrack interior, possible canteen.

ble to determine its preservation state. It comprised an admission room, a treatment room and two sickrooms/wards.

A *H*641, ammunition bunker type III (48°17′03.96″N, 04°36′13.85″W) (**Figure 20**), was buried in the terrain and only a small portion of it emerged. It was not accessible; therefore, it was not possible to determine its preservation state. For security reasons the shells and the cartridges of the ammunitions were stocked in separated rooms.

A 4th open gun emplacement (48°16′54.37′N, 04°36″25.86″W) (**Figure 21**), of the same design of the 1st and 2nd open gun emplacements, was completely destroyed. Its ruins were covered by terrain and thick vegetation which prevented



Figure 20. Facing *H*622 and *H*638 (a) on the left *H*638 on the right *H*622; (b) *H*622 plan. 1 gas lock, 3 crew room, 6 observation post (Rudi, 1998); (c) H622 entrance; (c) H622 crew room (d) crew room, on the wall cot support joints; (e) H622 escape conduit; (f) H638 covered by the vegetation; (g) H638 plan. 1 gas lock, 6 observation post, 36 admission room, 37 treatment room, 38 sickroom/ward (Rudi, 1998); (h) H641 plan. 6 observation post, 11 shells room, 12 cartridge room.





Figure 21. 4th open gun emplacement (a)-(b) ruins covered by terrain and thick vegetation.

any recognition.

A Vf58C tobruk (48°16'58.20"N, 04°36'21.61"W) facing the sea. It was near the 4^{th} open gun emplacement and presented a well preserved concrete structure without damages due to the bombardment or combats. It was a component of the *H.K.B.*1274 security perimeter.

The search on the ground for 6×7.5 m mod. M32(f) AA gun emplacements, 3×2 cm Flak 30 gun emplacements, 2×7.5 cm assault gun emplacements, three other *Vf*58*C tobr ruk*s, $4 \times$ Maxims in FCP emplacements (Atlantikwall Co UK., 2016), wooden barracks and rests of a metallic barrier provided no result.

5. The H.K.B. 1274 Organization

On the basis of the above description, the H.K.B.1274 organization can tentatively be traced out as follows. The Kommandantur (headquarter) of the battery and lodgements of German officers were probably located in Camaret and in the French crenelated guardhouse, the only worthy residence on the site. The guns in the R669s of the Petit Gouin pointe were protected against air and field attacks but their shooting range was restricted to the direction of Camaret and the Camaret's Gulf for their defence or bombardment. The open gun emplacements on the Grand Gouin pointe, disposed parallel to each other in the seaward, west direction, their guns were exposed to air and field attacks but their shooting range, up to 20 km, was unrestricted. This explains why the Mission 601 bombardment aimed principally to H.K.B.1274 Grand Gouin components and left aside the Petit Gouin components. The about 2 m wide access way in each open gun emplacement was unsuited for vehicle circulation. The ammunitions in the two Vf 51a were transported to the circular gun emplacement by gunners using carts. The R501SK and R502SK hosted respectively 6 and 12 gunners with one or more officers, which allow estimating at about 20 the number of the servants in each open gun emplacement. The platform probably hosted a radar FMG 40 G (gB) Calais B (Lippmann, 2016), mounted on its own three leg support and the nearby lodgement barrack hosted instrumentation and personnel in charge of its work. The 150 cm parabolic searchlight was probably a type Sw 34 or 37. It was serviced by a crew of 9 members, sometime formed by Helferinnen (female helpers) (Müller, 2002). Although no other searchlight emplacement was found,

probably this searchlight was not the only one in service at H.K.B.1274. The rangefinder device of the observatory and fire direction bunker was probably a telemeter mod. Em 4m R(H) 34 or Em 4m R(H) 36 (Müller, 2002) hosted in the observation room. The square and the rectangular emplacements probably hosted a fuel depot. The parade and training ground was located between the 2nd and 3rd open gun emplacement. Woden barracks hosting services like a radio station, soldiers' lodgments, one or more kitchens canteens, cinema, douches and latrines, were probably located in front and between the open gun emplacements. Other services were certainly located in requisitioned buildings and apartments in Camaret. The faced H622 and H638 formed the H.K.B.1274 health care block. The H638 received the ill and injured personnel allowing the surgeons and nurses to operate also in case of attack. The faced H662 lodged this medical personnel. The H641 hosting ammunitions was disposed, for security reasons, as far as possible from the other H.K.B.1274 components. No specific power supply bunker has been identified; therefore, the battery probably received electrical power from the French public power network. The personnel in service at the battery can be roughly estimated at about 300 - 400 officers and soldiers. The number of the killed among the *H.K.B*.1274 personnel is unknown. Probably, after the bombardment, the surviving part of ithe personnel replied for participating to the defense of the Festung (fortress) Brest.

6. Conclusion

Mission 601 was a successful strategic bombardment aimed to eliminate all the most important German military structures on the Crozon peninsula. A majority of the non-guided bombs used against H.K.B.1274 did not hit its most important components (Figure 2) but, however, destroyed wooden barracks, tranches and communication paths. However, a minority of them caused the partial damage of the 1st open gun emplacement, the R636a and the complete destruction of the 2^{nd} and 3^{rd} open gun emplacement and the 5 \times 75 mm C9 gun emplacements. The anti-aircraft fire of H.K.B.1274, although radar assisted, as that of the other German bases around Brest (Tomezzoli, 2009), according to the bombardment report (Bohn, 1998), was not very effective in view of the relevant number of German structures damaged or destroyed and the low number of Mission 601 bombers lost or damaged. Now that HKB1274/StP C342 and its organization are known and the way is open for further studies.

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