



WMF *News*

WMF is a section of the Simon Stevin Centrum
Edition 3 of 2005 Composed by Frank PHILIPPART

Dear Reader,

Here is the third newsletter of 2005. This time I can offer you an article from a Czech colleague about an aspect of their fortification line. Secondly you can read about surviving relics of the Second World War.

If you have any suggestions concerning this newsletter, feel free to tell me about them : fphilippart@be.safmarine.com

Enjoy it.

BELGIUM

Tancrémont Fort

The famous fort of Tancrémont that resisted the Germans until the day after the armistice of May the 28th has now its own website : www.fortdetancremont.be

ATLANTIC WALL

Last working Würzburg radar

Did you know that the last working Würzburg radar is situated in Belgium? Yes, this radar stands on a scientific plant on the territory of the village Humain near Marche-en-Famenne. But what does such a German radar do on the quiet heights of southern Belgium??



The astronomical radio observatory follows up the sun activity for years with radio telescopes. They measure the radio flux on the sun on a wave-length of 610 Mhz from sunrise to sunset. They use for this purpose since the fifties a parabolic antenna with a diameter of 7.5 m and that's our Würzburg radar. After the war Belgium received it as a part of war reparations. It was rebuilt to a detector that follows continuously the movement of the sun and that registers the flux of the sun. By means of this flux they are able to follow variants of sun-activity of a sun-cycle. More over they can measure individual sun-bursts. With a burst the flux increases by several degrees.



WÜRZBURG RIESE

This radar was designated as an *FmG 65*. The *Kriegsmarine* variant was known as *FuMo 214 See Riese*. It was also called **GIGANT** because of its parabolic antenna with a diameter of 7.5 m. The radar calculated the location, the distance and the firing angle to an aircraft. Some of them were modified for the coast guard. The range of the radar was 60 Km, but this was dependent on the height of the aircraft.

Unfortunately they stopped the radar in 2005 because there are no longer funds to keep it going. Hopefully there will be soon a solution before it turns into a lump of rust.

Thanks to Dr Ronald Van Der Linden (director of the Royal Astronomical Observatory) and to Paul Van Cauteren

A second original of the Belgian 12 cm gun

You certainly know this one. The gun stands on one of the open emplacements at Raversijde (BE), but that one is a replica. It belonged to the *MKB Saltzwedel neu (3/204 MAA)*. An original stands in the Army Museum in Brussels.



The replica at Raversijde.



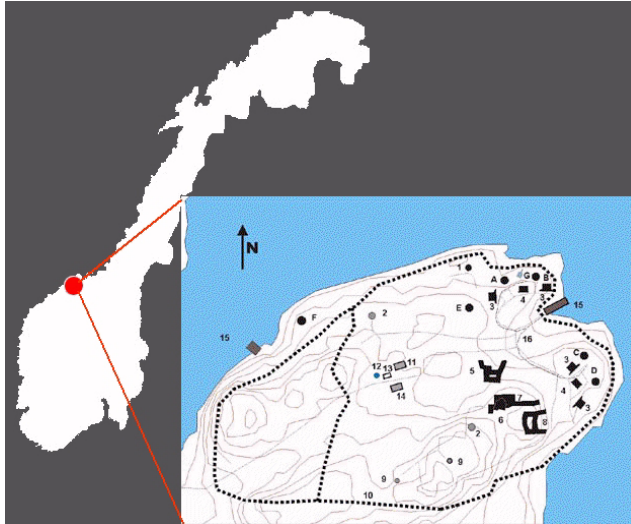
An genuine 12 cm in Brussels.

It's known by the Germans as the "12 cm K 370 (b)" gun but the initial Belgian indication is "Canon de 120 L Mle 1931". It entered the Belgian army service in 1934. In 1939 there were 24 guns in line. Several of these guns were captured and reused in coastal batteries.

The specifications of the gun together with a German equivalent, the Schwere Feldhaubitze 18

	12 cm K 370 (b)	15 cm sFH 18
Caliber :	L/37	L/29.5
Length of the piece :	442,6 cm	444 cm
Weight in action :	5450 Kg	5512 Kg
Max range :	17500 m	13250 m
Muzzle velocity :	760 m/sec	520 m/sec
Elevation :	0° to +38°30'	-3° to +43°
Traverse :	60°	60°
Rate of fire :	1 rate per minute	4
Shell weight :	21.93 Kg	43.5 Kg

But did you know that there exists a second original? The second one stands in Norway. The coastal battery of the army *HKB Kvalvik* was equipped with them.



- A, B, C, D - OB für K370
- E, F - OB für Scheinwerfer
- G - 15cm SKL/45
- 01 - OB FlaK 02 - vermutet OB FlaK
- 03 - R 621 04 - R 607
- 05 - Felshohlbau 06 - R 636SK
- 07 - Felshohlbau 08 - Felshohlbau
- 09 - MG Stellungen 10 - ehemalige HKB Grenze
- 11 - Offiziersbaracke
- 12 - Brunnenschacht
- 13 - ehemalige Zisterne 14 - Perdestall
- 15 - Schiffsanleger 16 - Schmalspur Eisenbahn

Other batteries in France are : MKB Ault/Molière, MKB Granville 3/608 MAA



The other genuine 12 cm K 370 (b) in Norway.

Thanks to Erik Ritterbach and Erik Ettrup

Source : <http://www.atlantikwall-research-norway.de/>

Artillerie Côtière, Atlantikwall et Südwall en France. Alain Chazette
German artillery of Terry Gander

CZECHOSLOVAKIA FORTIFICATIONS

Pillboxes of Czechoslovak fortification 1935 – 1938

Author : Jiří Vaněček

The first type of pillboxes¹ – *light fort Mark 36* – was built mainly in 1936 in number of 864 objects. They were only copies of similar bunkers used in France. Their embrasures (from one to three) were situated in the front of bunker, so the direct fire of enemy from long distance could easily destroy them. Bunkers of this type were built in small groups or in very short lines mainly on top of hills to cover crossroads, bridges, railways or similar important buildings.



Equipment inside of the bunker was very simple – it consisted of a wooden table under each embrasure to place machine guns (Mk 24 – Schwarzlose, Mk 26 – MG26(t) or Mk 37 – MG37(t)) and steel doors. Embrasure could be closed by 20 mm thick steel plate. Little number of objects had small ventilator.



Czechoslovak fortification lines in October 1938

There are four variations of light forts Mark 36 – type A, B, C and E. All types except type A can be resistant against hit of one 75 mm cannon shell or 81 mortar shell.

Type A:

- two embrasures
- crew of 4 men
- 50 cm thick reinforced concrete ceiling and wall with embrasures
- side of nape is 20 cm thick

Type B:

- two embrasures
- crew of 4 men
- 50 cm thick reinforced concrete ceiling
- 60 cm thick wall with embrasures
- side of nape is 30 cm thick

Type C:

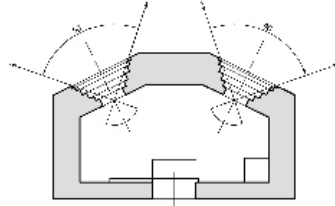
- three embrasures
- crew of 6 men
- 50 cm thick reinforced concrete ceiling
- 60 cm thick wall with embrasures
- side of nape is 30 cm thick



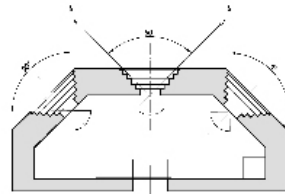
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Light fort Mk 36 type A, B



Light fort Mk 36 type C

Type E:

- there were found only two objects of this types, both are different
- one embrasure

Because of their position in terrain, absence of periscope, close defense and big vulnerable embrasures put a stop to the building of this variant of pillboxes at the end of 1936. During WWII a lot of light forts Mark 36 were destroyed by Germans.



Thanks to Yvonne Mayo for the spell check.

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