# The Swedish Army 1939-1945 - Engineer troops

### Introduction

The Swedish engineering troops are celebrating their 150th anniversary this year, so it may be a suitable occasion to look at the organization of the engineering troops during the war and their role in Operation Rädda Denmark.

The defense arrangement of 1936 meant for the engineer troops that the telegraph troops - Fälttelegrafkåren (Ing 3) - were separated into a special weapon type, after which the engineer troops consisted of the following units:

Engineering units from 1937	Garrison
Svea engineering corps (Ing 1)	Stockholm
Göta engineering corps (Ing 2)	Eksjö

Boden's engineering corps (Ing 3) (until 1937 Ing 4) Boden

## The telegraph troops

The former Fälttelegrafkåren then became the Signal Regiment (S 1), based in Stockholm (IV. military area). The regiment had independent companies located in some of the military regions:

The signal regiment's company in Kristianstad S 1 K I. Military area

The signal regiment's company in Skövde S 1 Sk III. Military area

The signal regiment's company in Skövde S 1 B VI. Military area

## War organization

The three engineer regiments provided, among other things, upon mobilization the following units:

- An engineer battalion in each infantry division á staff, 2-3 engineer companies (of 3 platoons) and a park company of 2 platoons, incl. light field bridging equipment.
- An engineer battalion for each corps á staff, a number of engineer companies, a park company and field bridge train, with heavy field bridge equipment, and a special road construction company.
- Independent engineer companies for each armored brigade and motorized infantry brigade.



Flamethrower w/41.
From Source 7.

In 1939, the engineer battalions in the infantry divisions were mainly horse-drawn, while the corps engineer battalions were motor-drawn.

During the war, the number of motor vehicles increased significantly, as did modern equipment.

The manpower in the engineer battalions also grew significantly. Source 6 thus provides the following figures:

- An engineer battalion at division level consisted per August 1941 of approx. 1,200 men, against 655 men in 1937.
- An engineer battalion consisted per August 1941 of approx. 1,600 men, against 531 men in 1937.

### Storm boats

In relation to Operation Rädda Denmark, the engineering troops had to provide the approx. 800 stormtroopers, which, upon landing on the open coast, were to bring the invasion force ashore from fishing cutters and other vessels.



An overshipping boat m/33, the photograph below

a demonstration in Stockholm, 11 October 1942. From Source 7.

These are the so-called ö-båtar, which are also known from the Danish Brigade's corresponding landing plans.

In the Brigade, the designation Ø-båt was used for what is probably the Swedish army's *överskeppningsbåt m/* 33 1).

In addition to the boat's driver, an island boat could carry 6 men with full field equipment.



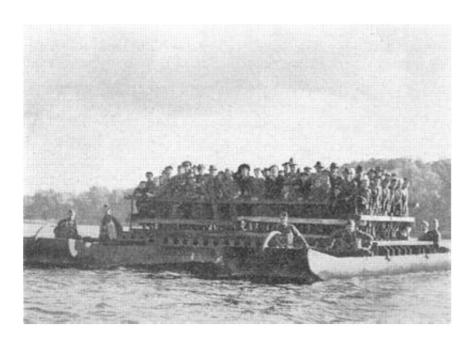
Norwegian pioneer soldiers practice crossing streams in Voxna Camp, approx. 1944. From Source 8.

As the Norwegian pioneers show, the boats could also be propelled using oars.

The Danish Brigade acquired 80 outboard motors for its 140 Ø boats; the type was named *Archimedes*, but whether it was also the "authorized" outboard motor in the Swedish engineering troops is not known.

See The Danish Brigade in Sweden 1943 - 1945 - The Danish Flotilla, Part 1.

### Field bridge equipment



Pontoon ferry on Djur-gårdsbrunnsviken, photographed during an exhibition in Stockholm, 11 October 1942. From Source 7.

The engineer troops' field bridge equipment would also have played a significant role in connection with a possible landing operation in Denmark, i.a. in the form of ferries, which could transport material ashore from cargo ships, unanchored off the Øresund coast.



125 m long pontoon bridge over Dalälven, at Laxön; load capacity 15 tons. The picture was found on the Internet.

As a supplement to ferries, the field bridge material could also be used to build temporary quay facilities that could facilitate landing.

### **Vehicles**



Scania-Vabis truck LB350. From Source 9.

The truck was, among other things, used by the engineer troops as a means of traction for block wagons with bulldozers.



Volvo off-road truck n/42. From advertising brochure for Military Vehicles Museum Malmköping. The truck here is not necessarily associated with the engineering troops, but is more shown as an example of a type of truck, which of course is also used in the engineering companies.

# Engineering tasks in connection with Operation Rädda Denmark

As a starting point, the Swedish defense was not equipped for landing operations in foreign countries and thus had neither actual landing craft nor material for the construction of artificial harbors, à la the artificial harbors of the allies (Mulberry 2)), which were established off the coast of Normandy.

In connection with the planning of Operation Rädda Denmark, the engineer troops were thus given a major task together with the navy in improvising how the invasion force was to land. Colonel Inge Hellgren, Göta ingenjörskår, was responsible for the engineering side of the planning work,

and he was naturally very concerned with how the troops were to be landed, a question which he felt did not sufficiently concern the naval planning staff.

Just as with the Allied planning prior to the invasion in Normandy, a fixed port therefore came to play a major role, and Helsingør, due to its short distance to Denmark, was very naturally designated as a particularly suitable port of embarkation for the bulk of the heavy equipment of the invasion force, but before harbors could be expected to be secured and/or as an alternative to this, one had to expect to also have to land heavy equipment on an open beach.

### **Transport needs**

# Transport fleet (final statement as of 5 May 1945)

- Approx. 160 tanks
- 100 artillery pieces
- 1,500 all-terrain vehicles, including passenger
- cars 4,000
- trucks 500 special
- vehicles Supplies of all kinds, including ammunition and catering

- 25 cargo
- ships 3
- ferries 232 barges, tugboats, motorboats
- etc. 570 fishing boats

Added to this were the vessels that the Danish Brigade had or had planned to have.

The navy's planning staff worked from the idea that the material should preferably be put ashore from cargo ships and ferries, i.e. in a port, while the army's planning staff did not think that there was time for elaborate convoy traffic, but that it was rather about - in the first wave - to be able to land tanks and anti-aircraft guns on open beach before the supposedly passive German forces decided to take action against the invasion.

In the army's planning staff, it was calculated that for the transport of the tanks and the 24 antiaircraft guns, 84 barges and 42 tugboats would be used, including losses in the first wave of 33% among barges and tugboats.

The army's planning staff imagined that tanks would be loaded onto barges, which would then be towed across the Øresund. Further along the Danish coast, the barges had to turn, after which the transoms had to be blown away, so that the tanks could drive ashore on the beach, which had to be reinforced by special "mats" (must be something like column road).

It was probably just as well that the operations were not carried out in practice...

### **Sources**

- 1. *Aid to Denmark Military and political relations 1943-1945* by Ulf Torell, General Förlaget, Stockholm 1973, ISBN 31-38-01693-1.
- 2. Swedish regiments Unit names and unit numbers, from Militaria Swedish Military History v/Hans Högman a good introduction to Swedish military units, including their names and numbers.
- 3. Militärkalendern 1944, Åhlén & Åkerlunds Förlag, Stockholm, 1943.
- 4. The engineer troops celebrate 150 years from the Swedish Armed Forces (the Swedish Army's official website).
- 5. Citizen's book on national defense by Erik Malmström (ed.), General Staff, Stockholm 1939.
- Our preparedness is good A study of the military preparedness in Upper Norrland 1939-1944 by Sarah Arildsson and Mikael Lidberg. A thesis from Luleå University of Technology, in which Boden's engineering corps is mentioned.
- 7. On guard for Sweden by master JH Rantzau, Folk og Værn, no. 10, 1942.

- 8. From *The Norwegian police troops in Sweden 1943-1945* by Tore Dyrdahl (ed.), Ministry of Defense Press and Information Department, Oslo approx. 1983, ISBN 82-90390-07-6.
- Historic Military Vehicles Directory af Bart Venderveen, After the Battle, London 1989, ISBN 0900913-57-6.
- 10. Per Albin Hansson and the Swedish D-Day by Per-Anders Lundström, from Swedish Military History Library.

### Supplementary material about the Swedish defense of the period

- Operation Save Denmark
- The Swedish Army 1939-1945 Infantry
- The Swedish Army 1939-1945 Armored troops
- The Swedish Army 1939-1945 Artillery
- The Swedish Army 1939-1945 Luftvärnsartilleriet
- The Swedish Navy 1939-1945 The Navy
- The Swedish Navy 1939-1945 The coastal artillery
- The Swedish Air Force 1939-1945 Operation R\u00e4dda Denmark
- The Swedish Air Force 1939-1945 Experiments with airborne units

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#### To note:

- 1) The information about the model year comes from Föreningen Armé-, Marin- och Flygfilm, which in its overview of films from 1930-1939 mentions film no. 12.192 *Officerskursen 1935-37*, in which images of *överskeppningsbåt m/33 are shown*.
- 2) See e.g. website Combined Operations for a mention of the Mulberry concept.