

The Swedish Army 1939-1945 - The anti-aircraft artillery

Introduction

The role of the anti-aircraft artillery in Operation Radda Zealand was, according to the available sources, quite modest - a total of 24 anti-aircraft guns (Source 1).



40mm anti-aircraft automatic cannon w/36.

At the same time, a postcard reproduced from the Association for Preparedness 1939-1945.

The two infantry divisions that were to carry out the landing on Zealand - I. and XI. Division - each had a light anti-aircraft battery, probably equipped with 40 mm anti-aircraft guns m/36, possibly supplemented by 20 mm anti-aircraft guns m/40.

In addition, there may be one or more batteries of medium anti-aircraft artillery, probably equipped with 7.5 cm anti-aircraft cannon m/37.

Swedish anti-aircraft artillery

During the war, the Swedish army had the following main types:

- 20 mm machine gun w/40
- 40 mm anti-aircraft gun w/36
- 7.5 cm anti-aircraft gun w/30
- 7.5 cm anti-aircraft gun w/37
- 10.5 cm anti-aircraft gun w/42.

To this were added the relevant types used in the navy - the fleet and the coastal artillery, in addition to a number of 40 mm and 7.5 mm pamphlets that were ordered from Bofors by various foreign buyers, but which at the beginning of the war were seized and introduced into the Swedish defense.

Source 10 mentions the German 2 cm anti-aircraft gun should have been used, but I have not seen it mentioned elsewhere.



20 mm machine gun w/40, in driving position.
From Source 6.

20 mm maskinkanon m/40

The machine gun is also known from the Danish Brigade's machine gun battery - 2nd Company of 5th (heavy) Battalion - as well as the machine gun group in the Brigade's staff company.

New here is the picture of the cannon in driving position. Source 6 also shows pictures of the machine gun in stationary trim

For a discussion of the pamphlet's use in Swedish infantry regiments, see *The Swedish Army 1939-1945 - Infantry*.

The pamphlet's effective firing range was approx. 1,300 m; however, only 1,000 m when using armor-piercing ammunition.
(Source 6)



40 mm anti-aircraft gun w/36.

From simultaneous gloss image, borrowed by Gert Strande Sørensen.

40 mm anti-aircraft gun w/36

Among anti-aircraft guns from the war, Bofors' 40 mm anti-aircraft gun is quite well known and hardly requires any further mention, used and largely copied by both the Allies and the Axis Powers.

A comprehensive description of the pamphlet and its international variants can be found in Source 6.

Deployed as anti-aircraft, the pamphlet had an effective firing range of approx. 4,000 m. (Source 2)



7.5 cm anti-aircraft gun m/30, towed by Artillery tractor m/28.

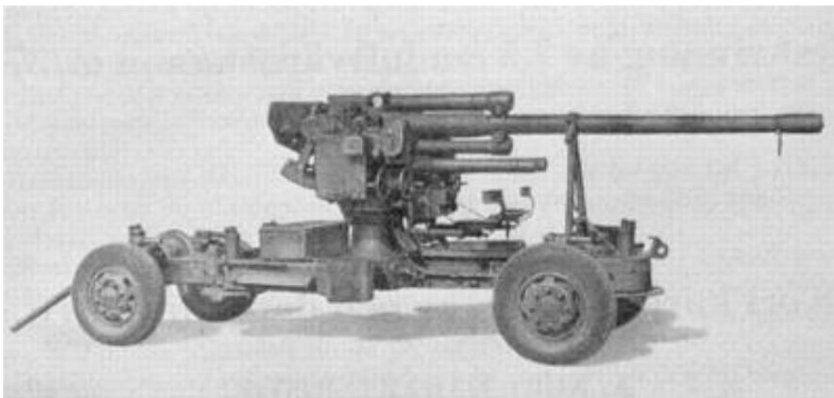
From Source 6.

7.5 cm anti-aircraft gun m/30 and m/36

This pamphlet, produced by Bofors, was the Swedish Army's first modern anti-aircraft gun. It was acquired in the period 1932-1937 in a number of 19 pieces.

In addition to this, 55 units were acquired before the war. of an almost similar type - anti-aircraft gun m/36 - calculated stationary set-up.

Deployed as anti-aircraft, the pamphlet had an effective firing range of approx. 6,000 m. (Source 2)



7.5 cm anti-aircraft gun w/37.

From Source 6.

7.5 cm anti-aircraft gun w/37

From 1941 to 1945, 206 units were delivered. 7.5 cm anti-aircraft gun m/37 for the Swedish army, where they were part of the mobile anti-aircraft batteries.

With experienced operating personnel, a rate of fire of 15-20 shots per minute could be achieved.

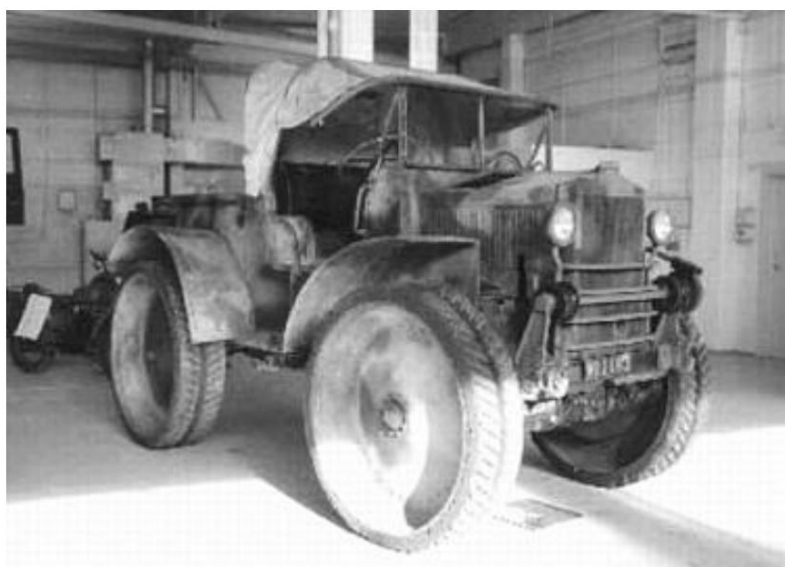
Information on effective firing range is not available.

10.5 cm anti-aircraft gun w/42

10.5 cm anti-aircraft gun m/42 is similar to m/37, only larger. The army had approx. 30 pcs. of this type and the Coastal Artillery had 20 Information on effective firing range is not available.

See Source 6 and 10 for a picture of the pamphlet.

Kanontraktor m/28



Artillery tractor w/28.

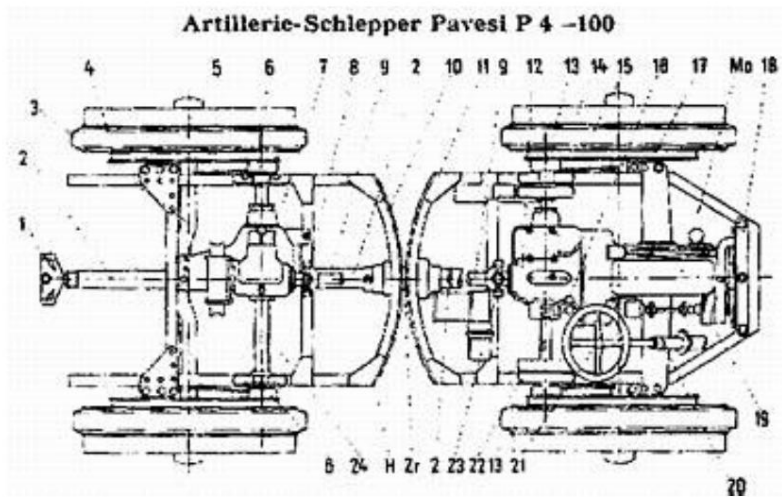
From Source 17.

The cannon tractors were manufactured by *NOHAB Industri AB*, Trollhättan, on the basis of a license agreement with the Fiat factories in Italy.

The Pavesi tractor is one of the earliest four-wheel-drive vehicles and is named after Engineer Pavesi. The vehicle saw the light of day in 1913 and was intended to be used in agriculture.

The cannon tractor is on display at *the Wheeled Vehicle Museum* in Malmköping.

In 1914, a French officer became interested in the vehicle, but as far as is known, it was not seriously developed until after the end of the First World War. Fiat manufactured the tractors right up until 1942.



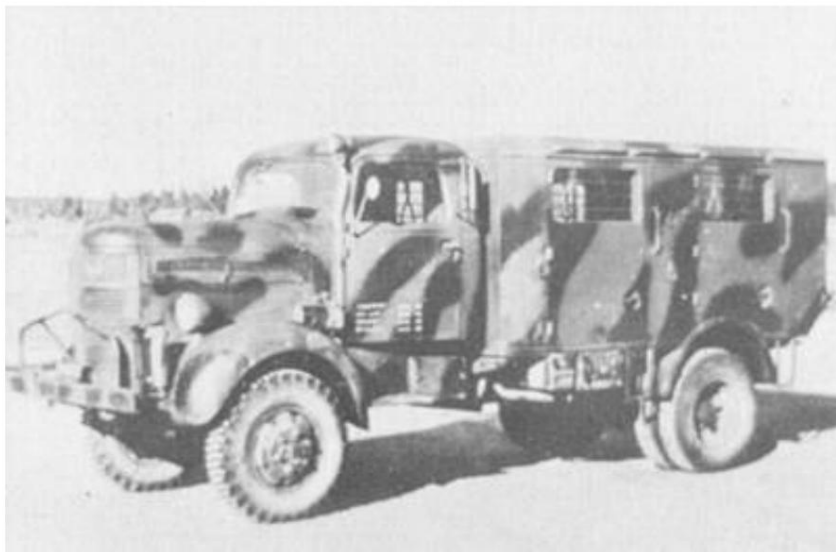
Construction of the Pavesi tractor.

From Tanks!, which however does not include an explanation for the numbered parts.

Using an articulated chassis, the front and rear end are able to move horizontally and vertically - independently of each other.

The Pavesi tractor was part of the Italian army from 1926 and was evaluated by other European armies - among others in Bulgaria, Denmark [1](#)), Hungary [2](#)) and England.

Other cannon tractors



All-terrain vehicle w/ 42VP.

From Source 9.

It is not clear from my currently available sources which type of gun tractor was used for the 7.5 cm anti-aircraft gun m/37.

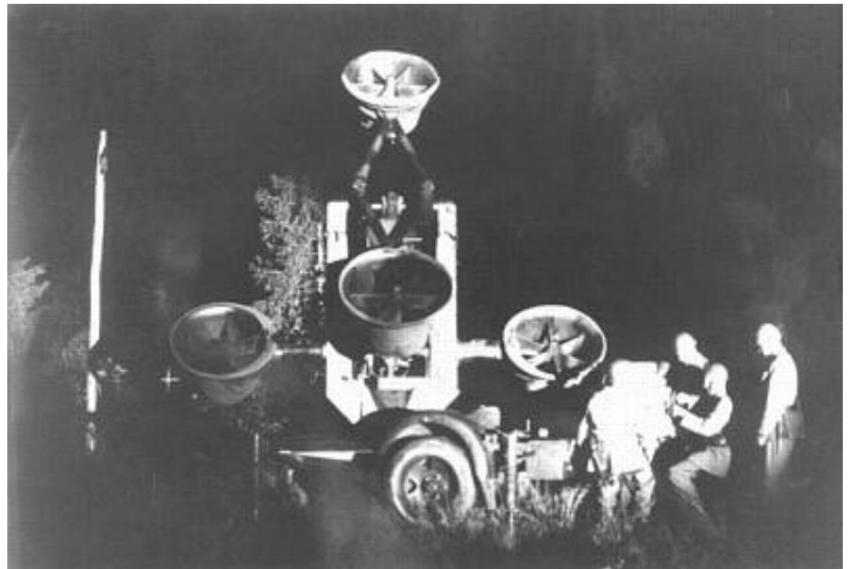
It could be the Klöckner-Humboldt-Deutz A3000 [2](#)) purchased in Germany - Terrängbil m/42 - or perhaps the [Volvo](#) Terranbil m/42VP shown here.

In the truck's box-shaped superstructure there was room for 16 men.

Other equipment



150 cm spotlight w/37.
From Source 9.



Small device.
From Source 9.



Distance meter.
From Source 2.

Organisation

In 1939, the Swedish anti-aircraft artillery included two regiments: *Royal Karlsborg Air Defense Regiment* (A 9) and *Royal Östgöta Air Defense Regiment* (A 10).

With the Army Order of 1942, the air defense was separated from the artillery and formed an independent type of weapon, which was simultaneously expanded to 3 air defense regiments and 4 air defense corps 3):

- Karlsborg Air Defense Regiment (Lv 1) Östgöta
- Air Defense Regiment (Lv 2)
- Stockholm Air Defense Regiment (Lv 3)

- Stockholm Air Defense Regiment Battery on Gotland (Lv 3 G)
- Scanian Air Defense Corps (Lv 4)
- Sundsvall's Air Defense Corps (Lv 5)
- Gothenburg Air Defense Corps (Lv 6)
- Luleå anti-aircraft corps (Lv 7).

These anti-aircraft units provided the mobilization units, which i.a. made up the mobile air defense units, which were part of divisions and brigades, as well as the stationary air defense units, which ensured, among other things, Stockholm.



7.5 cm anti-aircraft gun w/ 30.

From simultaneous postcards found on the Internet.

The stationary part of the air force - the home defense - in Stockholm, Gothenburg and Malmö included a significant element of volunteers, a kind of home guard units. See more about Stockholm's air defense in Sources 9 and 10 [4](#)) and about the air defense of the Bofors factories in Source 11.

As for a more detailed organization of the anti-aircraft units, my sources are more sparse:

- In 1939 (Sources 2 and 3) an anti-aircraft division consisted of: Division staff, 3-4 gun batteries (each with 3-4 7.5 cm anti-aircraft guns) and 1 searchlight battery (with a number of searchlight sections, each with 4 searchlights, a listening squad and a number of anti-aircraft machine guns).
- In 1942 (Source 5) each division is assigned an anti-aircraft battery, with 20 mm and 40 mm anti-aircraft guns.
- A 7.5 cm m/37 battery (Source 6) consisted of 4 pamphlets and a crew of 95 men.

Closing

The Allied overflights of Sweden, on the way to and from Germany, gave the Swedish anti-aircraft artillery numerous problems, as the planes often flew higher than the guns could reach.

The following anecdotal radio correspondence (Source 4) between an Allied aircraft and Swedish anti-aircraft artillery provides an insight into the problems:

Swedish voice: *"They are now flying over Swedish territory!"*

Allied Voice: *"We're aware of that!"*

Swedish voice: *"We are now firing warning shots!"*

Allied Voice: *"We see it! They're shooting too short!"*

Swedish voice: *"We are aware of that!"*

Although it is not clear which types of anti-aircraft guns were intended to be deployed in Denmark, the possible types are presented here. I am therefore very interested in further information, especially on the organization of the anti-aircraft artillery field units/mobilization units.

Sources

1. *Aid to Denmark - Military and political relations 1943-1945* by Ulf Torell, Allmänna Förlaget, Stockholm 1973, ISBN 31-38-01693-1.
2. *Citizen's book on national defense* by Erik Malmström (ed.), General Staff, Stockholm 1939.
3. *Heere pocket book* by Kurt Passow, JF Lehman Verlag, Munich/Berlin, 1939.
4. *Second World War and Sweden - History and myth-making* by Jan Linder, Swedish Military Historical Library, Luleå 2002, ISBN 91-974056-3-9.
5. *An Introduction to The Royal Swedish Army in WWII* by Ingólfur Björgvinsson.
6. *Mats' Weapons Page* - a good introduction to Swedish weapons (mostly) and organization (less). See i.a. since description of 40mm Luftvärnsautomatkanon m/36, 7.5 cm Luftvärnskanoner and 10.5 cm Luftvärnskanoner..
7. *The renovation group - Enthusiasts preserve Swedish technology history* by Stefan Karlsson, AT Nytt (Information from ATS about Technical Service in the Army) no. 1/2005.
8. *Historic Military Vehicles Directory* af Bart Venderveen, After the Battle, London 1989, ISBN 0900913-57-6.
9. *Lv 3 Roslagen's Air Defense Regiment - the heirs to the Stockholm Air Defense Regiment (Lv 3). 10. 75 years in the service of the Air Force*, published by Stockholms Luftvärnsförening - Luftvärnets Fälsutbildningsförbund, 2002.
11. *Bofors Luftvärnsförening history*.
12. *Militärkalendern 1944*, Åhlén & Åkerlunds Förlag, Stockholm, 1943.
13. *Sweden's defense* by lieutenant colonel PA Mathiesen, Folk og Værn, no. 7, 1943.

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 - Engineer troops
- The Swedish Navy 1939-1945 - The Navy
- The Swedish Navy 1939-1945 - The coastal artillery
- The Swedish Air Force 1939-1945 - Operation Rädde Danmark
- The Swedish Air Force 1939-1945 - Experiments with airborne units

To note:

- 1) The Danish army acquired a single copy in 1927, which was compared with several other types. The result did not turn out in favor of Pavesi and instead the Danish-made Triangel-Kornbech cannon tractor was acquired.

- 2) See *The Swedish Army 1939-1945 - Artillery*.

- 3) See the "family tree" of the Swedish air force artillery here: [The Swedish Armed Forces in Halmstad - History of the Air Force](#).

- 4) The organization appears to be completely parallel to Copenhagen's Voluntary Air Defense Corps (formerly the Copenhagen Shooting Association's Recylkorps), mentioned in [About Copenhagen's air defense in the interwar period](#).