

The Honest John rocket system in Denmark 1960-1975

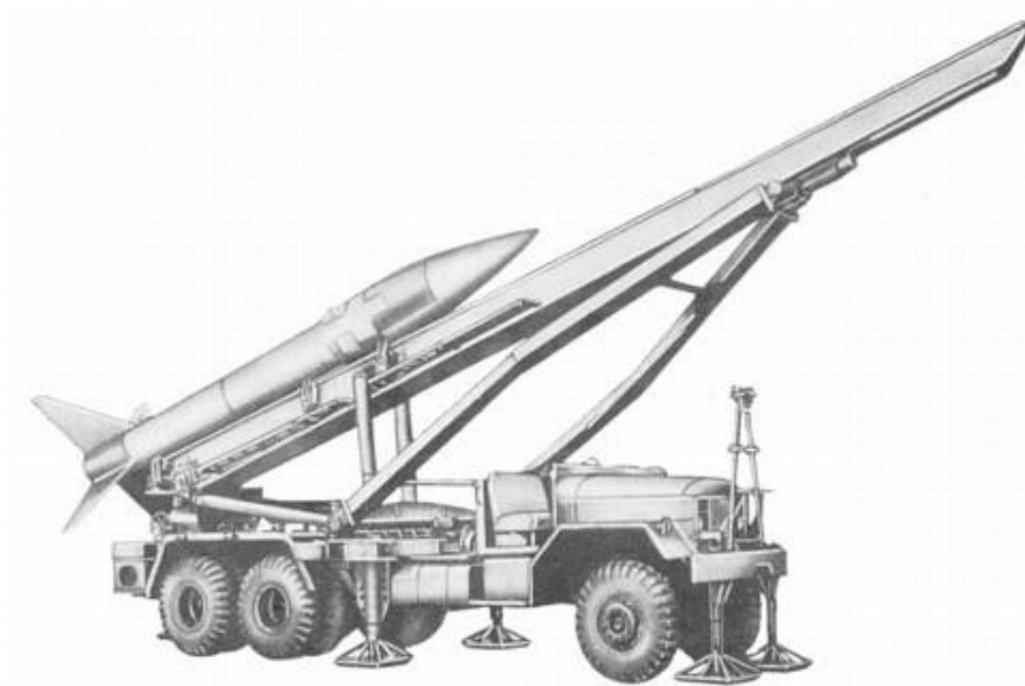
Introduction

This article is a discussion of the American ground-to-ground missile system Honest John, which was part of the Danish army from 1960. It is recommended to read the article *Et intermezzo i Artilleriet* by Major Uffe Smistrup in the Dansk Militærhistorisk Køretøjs-Forenings magazine No. 53, December 2003/January 2004 (Source 4) along with this article.

Today, the subject can hardly be dealt with without at the same time touching on the conditions surrounding the debate for and against the placement of nuclear weapons on Danish soil in peacetime. However, since this part of the story is not my primary concern, references are instead made to sources that deal specifically with this area - see *Postscript - About Danish nuclear weapons policy etc.*

I have previously touched on a part of the problem in my article *Luftværnsraketforsvaret i Danmark, 1959-1983*, in which the surface-to-air missile systems of the time - NIKE Ajax and Hercules - are mentioned.

The Honest John rocket system



762mm Rocket Guide M289 Va 1) [Honest John](#).
From Source 1.

The development of the Honest John system started in 1950, and the entire development history of the rocket system is told in *History of the Basic (M31) Honest John Rocket System* (Source 7) and *History of the Improved (M50) Honest John Rocket System* (Source 8).

Reports are based on extensive previously classified material and provide good background knowledge.

The rocket system was put into use by the US Army in the mid-1950s, and the rockets could deliver both conventional high-explosive ammunition, chemical warfare agents and tactical nuclear weapons.

The major components of the Honest John system

Remark

Table 1: Components

762 mm rocket		Data for the M31 version of the rocket.
M289 - rocket guidance		The first version of the rocket system (perhaps only at Zealand Artillery Regiment).
M386 - rocket guidance		The second version of the rocket system (perhaps only at Nørrejylland Artilleriregiment).
M55 - rocket carriage		The rocket was transported separately, in boxes.
M329 - rocket trailer		The trailer was pulled by the M55 transport vehicle.
M405 - rocket trailer 2)	—	A newer version of the rocket trailer that belonged to the M386 rocket-guided.
M62 - crane truck		Remained in service after the phase-out of the rocket system.
GMC 353 crew car		With rocket commander, motor vehicle driver and 8 men.
The AN/MMQ trailer		was pulled by a Dodge 3/4 truck, later by 1 - anemometer set - on trailer M101 a GMC truck.

The references in the table lead to mentions of the vehicles in question on the Danish Army Vehicles Homepage.



Some of the components of the Honest John rocket system: M55 rocket carriage, M289 rocket guide and M62 crane carriage.

From the Danish Army Vehicles Homepage 3). —



M329 rocket trailer, pulled by an M55 rocket car; at Zealand Artillery Regiment 4).

From Uffe Smistrup via Brian Brodersen

Where the rocket was transported separately on the rocket carriage, it could be transported over shorter distances together on the rocket trailer, which can just be seen behind the rocket control.

In the photographs above you can see - around the rocket itself - the M2 heating blanket that was used to preheat the propellant in the rocket. The power for the heating blanket was supplied by generators on the rocket control, respectively the rocket carriage and the rocket transport carriage. (Source 4 and Source 15)



**WIND SET, HEAVY DUTY
AN/MMQ-1**

*Anemometer AN/MMQ-1.
From Source 7.*

The last major component of the system was the anemometer set - *AN/MMQ-1*, which was transported on an M101 trailer (*M101 Trailer, cargo, 3/4-ton, 2-wheeled*).

The trailer was pulled by a *Dodge 3/4 t 4x4*; in Denmark later replaced by a GMC truck. The Dodge truck was too light as there were no brakes on the trailer.



*M101 trailer and anemometer AN/MMQ-1, photographed at
Holbæk Barracks, 8 April 1960.*

Measuring the current wind speed was of great importance for the rocket's precision, and especially the wind speed in the first 300 m (350 feet) of the rocket's trajectory is mentioned in Source 7 as being of decisive importance to the rocket's engagement.

A reference found on the Internet describes the anemometer's telescopic mast as being 5.4 meters (60 feet) high.

The photograph originates - via Brian Brodersen - from Carl Bjerre [5](#)), who is seen here up on the barn in the process of installing cables on the anemometer set, before the handover parade at Holbæk barracks on 8 April 1960.



2 1/2 t GMC, 6x6, CCKW-353, truck, with 12.7mm machine gun M/50 in anti-aircraft car mount M/50.

From Bent Larsen, Køge (formerly math) via Brian Brodersen.

Note the inscription MDSKVG 1 (staff car no. 1) on the bumper.

Further data on *GMC CCKW-353* can be found i.a. in the type approval with associated appendix, which is available via the Danish Military Historical Vehicle Association. The truck is available with a fixed cab.

The introduction of the Honest John system in Denmark



762 mm rocket launcher M289 Va Honest John, Holbæk Barracks on 8 April 1960.

The photograph originates - via Brian Brodersen - from Carl Bjerre.

After a longer prior debate, which is discussed in detail in Denmark's nuclear weapons policy during the Cold War by cand.scient.soc. Mads Løkke Rasmussen (Source 16), in June 1959, around 20 Danish officers and commanders were sent for *on-the-job training* at the American forces in Germany to learn everything related to the operation of the new weapon. The training was completed with two firings in the shooting range at Grafenwöhr 6).

Initially, the rockets went to the Zealand Artillery Regiment (2nd Field Artillery Regiment, until 1961), where the 4th Artillery Division was augmented by a divisional troop and 1st and 2nd Battery.

Each battery was equipped with two 762 mm rocket launchers.



762 mm rocket launcher M289 Va Honest John, Holbæk Barracks on 8 April 1960.

From Brian Brodersen.

The picture is "scissored" from an unspecified artillery history book.

The pamphlet on the right of the picture is a 155 mm howitzer M/51, easily recognizable by its shiny tube. While anxiously awaiting the arrival of the rocket material, the soldiers in the two batteries had been trained on the 155 mm howitzer M/51.

It is understood that the truck behind the rocket guidance is pulling an *M329 rocket trailer*.

The material arrived in Denmark in January 1960 and was unloaded in Aarhus Harbour, which thus became the scene of one of the earliest Danish demonstrations against nuclear weapons [7](#)).

However, the accompanying M62 cranes were taken over by the Air Force, which was in need of such in connection with major repairs of their F-84 fighters. (Source 9)

They were thus instructed to begin the training with cranes, which were borrowed from the Zealand Engineer Regiment.



Ward la France 6x6 crane truck.

From *The Automobile in the Army 1908-1983* by Frank Pedersen, 1983.

Jørgen Hansen further mentions that the cranes were possibly of the *La France type*.

Cranes of the *Lorain* type are also mentioned as a possibility. For pictures of these, refer to Lorain MC-4 and Lorain MC-254 (Danish Army Vehicles Homepage).

However, the engineer troops' cranes had the disadvantage that they could not move the boom when there was a load on them, and cranes had to be rented from Falck's Rescue Corps instead. However, Falck demanded that it was Falck crews who operated the cranes, which meant that they were not able to train the soldiers in operating the cranes. The situation was thus untenable and the battery commanders refused to carry out sharpshooting under these conditions.

The end of the story was that the M62 cranes arrived at Holbæk barracks the day before the first sharpshooting, probably still with the Air Force number plates, and that they were subsequently allowed to keep these organizational cranes.



762 mm rocket launcher M289 Va Honest John, 1960.

From Berlingske Tidende 2 April 2006.

The rendering comes from the image archive at Berlingske.dk.

The picture shows the first Honest John shooting in Denmark, which took place on 10 May 1960 at Stold Shooting Range, by Havnsø.

Soldier no. 5 from the left is possibly the later Major Jørgen Hansen, who was then the leader of the half-battery. (Source 9)

Interestingly in the photo, the American officer (in the dark uniform, with cap) is in the foreground.

The training was supervised by American officers who also made inspection visits to the batteries, i.a. to check readiness. Later, control passed to the Danish side. (Source 4) The soldiers with the white painted steel helmets are security personnel 8).

As stated in Source 4, the first firing was initially a "fuser", as a short circuit had occurred during preparation of the rocket. The short circuit was remedied with the help of a piece of insulating tape and a bit of technical ingenuity, after which this first Honest John rocket launch in Denmark could be carried out.



Preparation of 762 mm rocket guide Va M289 Honest John.

From Jesper Vilhelmsen via Ole Willumsen.

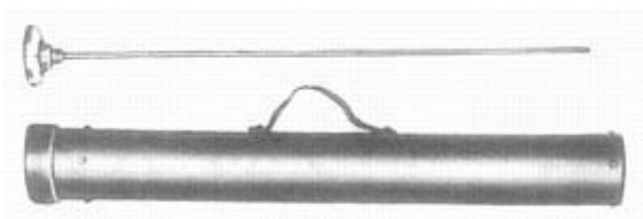
In the background you can see the anemometer, as well as the ubiquitous ladder, which here leans against the rear wheel of the rocket rudder.

The ladder was used when securing the earth connection from the rocket motor.

Jørgen Hansen says that the American instructors in Germany were very concerned about this particular relationship.

It was said, possibly as a joke, that during preparation for a launch in the United States, they had failed to secure the ground connection to a prepared rocket that was on a rocket trailer. Suddenly, static electricity caused the propellant to ignite, and the rocket and trailer disappeared across the prairie!

(Source 9)



M2 Gunpowder thermometer.

From Source 14.

The ladder was also used when attaching the gunpowder thermometer, which was inserted into a hole at the back of the rocket nozzle itself.



Preparation for shooting.

From Jesper Vilhelmsen via Ole Willumsen.

The photograph shows the battery's security personnel and perhaps the firing officer conferring fire data before firing at what is formally called the *firing range*. The boxes on the ground are probably launch boxes. (Source 9)

About the launch site, see later under *Organisation*.

The Honest John rockets belong to the Nørrejydske Artilleriregiment



762 mm rocket launcher M386 Va Honest John, Vester Allés Kaserne, Aarhus.
From Source 2.

In 1962, the Honest John system came - albeit without demonstrations - to Jutland, where it was part of the Nørrejydske Artilleriregiment (Århus).

The second delivery included rocket guidance of the latest model M386, which is known for its shorter launch ramp than the M289.

In this way, the army came to have a total of 8 rocket guides - 4 pcs. M289 and 4 pcs. M386. The distribution was such that the M289 rocket guides belonged to the Zealand Artillery Regiment and the newer M386 rocket guides belonged to the Nørrejylland Artilleriregiment.



HANDLING UNIT, TRAILER M-405

M405 rocket trailer, with "handling unit".

From Source 8.

Jesper Vilhelmsen mentions this as a possibility in the *Vehicles used with the Honest John weapon system* (in Source 4). Source 11 states that the rocket trailer M405, which belonged to the M386 rocket guide, was only used in Jutland, which I take as proof that the M386 rocket guide was also only used by the Nørrejylland Artilleriregiment.

The M405 rocket trailer was equipped with a "handling unit", which was a hand-operated crane. The crane allowed assembly of rocket and loading of rocket guidance, without the use of a crane truck. (Source 11)



23rd Artillery Division's 1st Battery launches a rocket on 24 January 1964 at Kysing Næs.

From Source 2.

At Nørrejylland Artilleriregiment, the 9th and 23rd Artillery Divisions were initially multiplied, with a battery (of two 762 mm rocket guides) in each division, while the divisions' second battery was equipped with four units. 203

mm howitzer M/55.

From 1967, the 9th Artillery Division consisted of a division platoon and two rocket batteries, while the 23rd Artillery Division consisted of a division platoon and two 203 mm howitzer batteries.

Organization

It has not been possible to find an official organization plan for a rocket battery, despite searches of the Garrison Library's extensive holdings of organization plans; an official organizational chart may never have been drawn up.

The following is therefore a best bet on how the organization was in practice. The overview has been prepared on the basis of information from Ole Ohlsson, Garrison Library, who, during a conversation on 18 April 2006, was kind enough to write down an overview from memory, supplemented with information from e.g. *Draft for Service in the Field at the Rocket Battery*, Army Inspectorate, 1967 (Source 11).

Table 2: The organization of the rocket battery, vehicles, etc.

Division Function	Battery Commander	Vehicles etc.
Division of command The second-in-command is the leader of the division of command.	Battery manager + driver/radio man	Jeep with radio
	Motor Ordinance	Motorcycle
	Deputy commander + driver/ radio man	Jeep with radio
	Motor Ordinance	Motorcycle
	Measuring officer + driver/radio man	Jeep with radio
	Motor Ordinance	Motorcycle
	Liaison officer + driver/radio man	Jeep with radio
	Signal section Signal officer and signal commander Hold the phone	Command station wagon (Dodge) Motorcycle (Signal Commander) 4 Telephone Wagons (Dodge)
	ABC squad	ABC Wagon (Jeep)
	Half battery driver + driver/radio man	Jeep with radio
1st half-battery The firing officer leads the half-battery in the absence of the half-battery leader (reconnaissance or similar).	Motor Ordinance	Motorcycle
	Shooting officer	Shooting center wagon (Dodge)
	Measurement group Surveyor	Gauge Wagon (Dodge)
	Weather squad 2 men	Wind van (Dodge) and anemometer
	Rocket section 1 rocket commander 8 men	Rocket guidance Crew car (GMC)
2nd half-battery The firing officer leads the half-battery in the absence of the half-battery leader (reconnaissance or similar).	Half battery driver + driver/radio man	Jeep with radio
	Motor Ordinance	Motorcycle

similar).

Shooting officer	Shooting center wagon (Dodge)
Measurement group	Gauge Wagon (Dodge)
Surveyor	
Weather squad 2 men	Wind van (Dodge) and anemometer
Rocket section	Rocket guidance
1 rocket commander 8 men	Crew car (GMC)

Ammunition sharing

Ammunition sharing driver + driver/ radio man	Jeep with radio
Motor Ordinance	Motorcycle
3 crane trucks	Crane truck M62
4 rocket trucks, each with 1 rocket trailer 1 personnel truck	Rocket carriage M55

Supply sharing

The commanding officer is the leader of the supply platoon

	Truck GMC
Platoon leader + driver/radio man	Jeep with radio
Motor Ordinance	Motorcycle
Weapon mechanic	Workshop van
Motor mechanic	Workshop van
Telegraph mechanic	Workshop van
Spare parts van	Workshop van

Ole Ohlsson remembers the battery's total number of motor vehicles as 44 and 8 motorcycles, but not all appear in the overview. I assume some of the shortfalls are made up by a number of supply trucks.

Apart from the battery commander's engine order and the signal commander's motorcycle, the other engine orders are placed based on my estimation.

Strength overview

Rocket Battery Power Figures (1970)

Officers 12

Personnel of the sergeant group 13

Private personnel 76

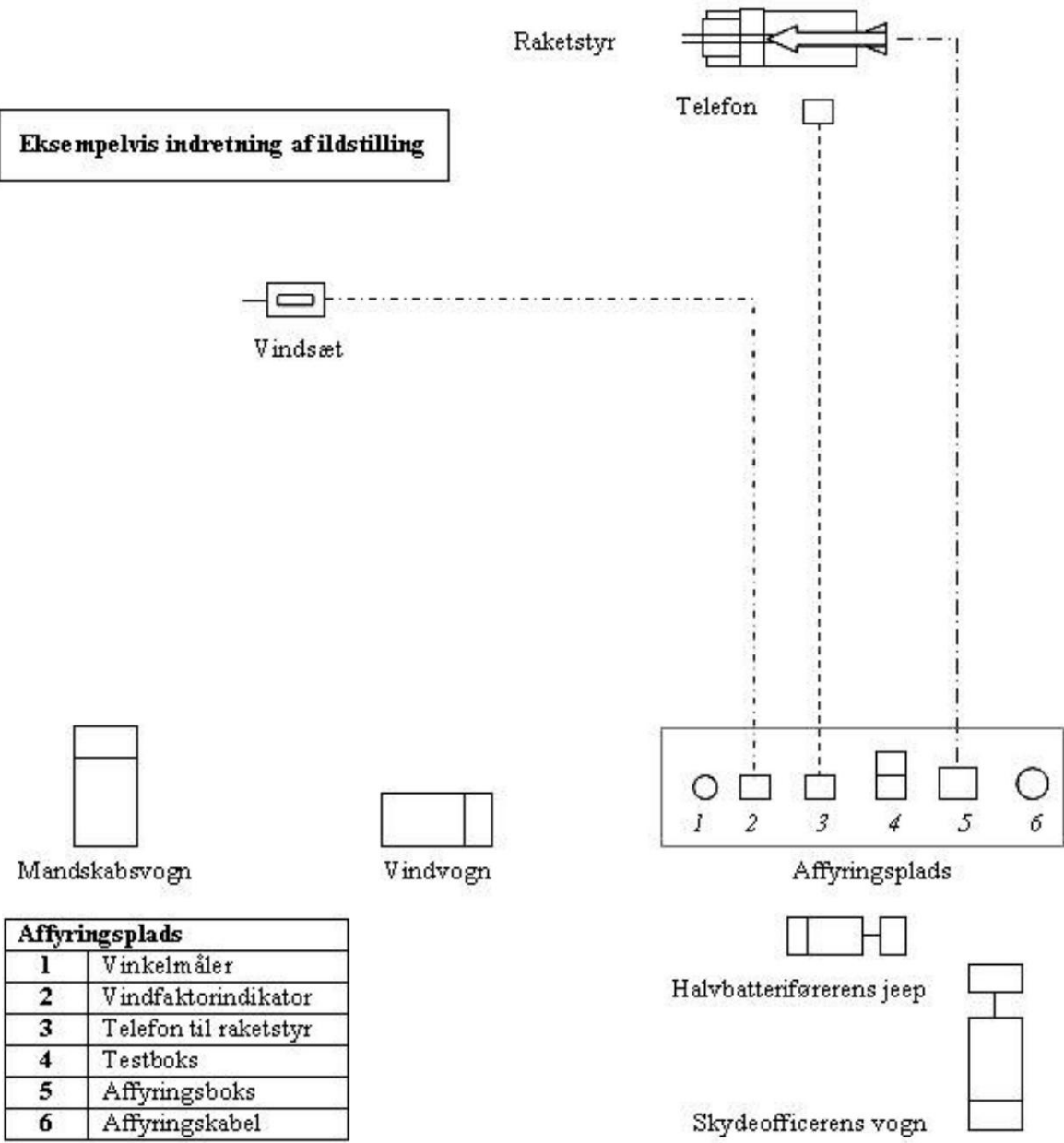
The rocket battery totals 101

The only information I have been able to find on the battery's power rating comes from *Preliminary Directive for Annual Alert Test at Honest John Battery*, Army Inspectorate, October 1970 (Source 12). Herein, a reference is made to an organizational plan - D 42 - but this information unfortunately did not contribute to a plan materializing.

Fire setting

The sketch below gives an impression of the principles of how the half-battery fire position is arranged.

Eksempelvis indretning af ildstilling



Affyringsplads	
1	Vinkelmåler
2	Vindfaktorindikator
3	Telefon til raketstyr
4	Testboks
5	Affyringsboks
6	Affyringskabel

For example, setting up a fire setting for a half-battery.
 Prepared based on Source 11's Appendix 4.

Shooting ranges



762 mm rocket Honest John, during firing at the Stold Shooting Range.
From Source 3.

The Zealand departments initially used the Stold Shooting Range at Havnsø. The target was an unspecified location in Sejerø Bugt. (Source 4)

After a short time, the shootings were moved to Jutland.

Source 4 states that the first shootings in Jutland took place in January 1961, from an area south of Aarhus, possibly Gylling Næs.

The firing was then moved to Kysing Næs, from where the Nørrejydske Artilleriregiment fired its first rockets on 21 June 1962 (Source 2).



Firing sites in Denmark, from which Honest John rockets have been launched.
The information is based on Sources 2 and 4; the map comes from Krak.dk.

It became increasingly difficult to find suitable shooting sites, but in May 1966 the Jutland units shot from stands at As Vig (by Jensgård). (Source 2)

Table 3: Shootings with the Honest John system in Denmark

14:57 04-02-07 From Location To Target

p	Pride
M1	Unspecified, in Sejerø Bugt

K	Kissing Nose
M2	Swan grounds
G	Gylling Næs
J	Jensgaard

The targets for shooting in Jutland were all Svanegruden, west of Samsø.

Source 2 reproduces two police orders - from 1962 and 1966 - indicating the location of danger areas etc.

In addition, shootings have taken place from the southern tip of Falster, with the waters around Hyllekrog as the target area, as well as in the western part of Southern Jutland, with the target area in the North Sea. (Source 10)

The rockets

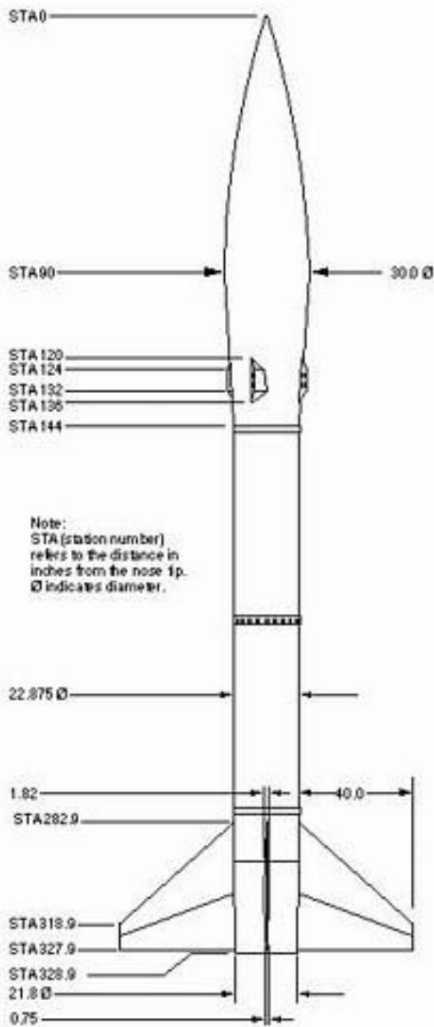
The Honest John system included rockets of the models M31 (with large guide fins) and M50 (with smaller guide fins).

Table 4: Rocket production From Source 6.

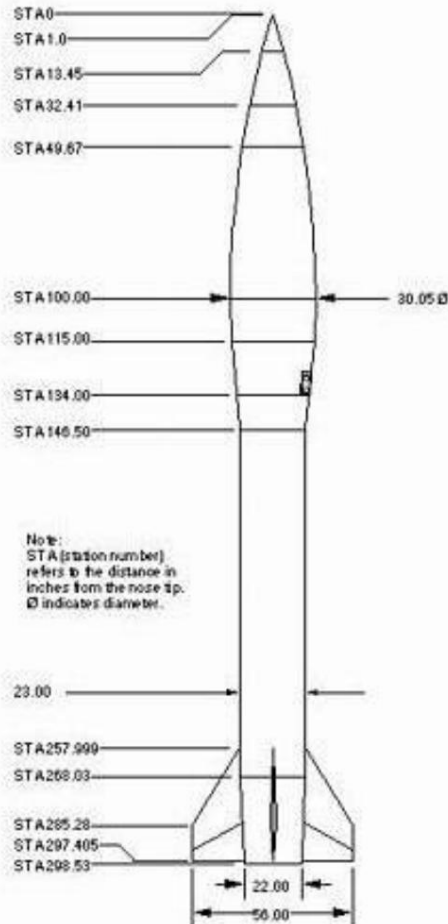
1952-1960	799 pcs. M31
1960-1965	7,089 pcs. M51

Both rocket types are mentioned in the *draft for the service in the field at the Rocket Battery* (Source 11), which is why the Army must have possessed, or expected to possess, rockets of both types. Both types of rockets could be launched from both types of rocket launchers.

The sketches below of the two rocket types clearly show the difference in the size of the control fins. For the sake of clarity, I have removed information about examples of the rockets' different paint patterns, as they appear on various American museum specimens. If you are particularly interested in this, please refer to the source.



Honest John rocket M31.



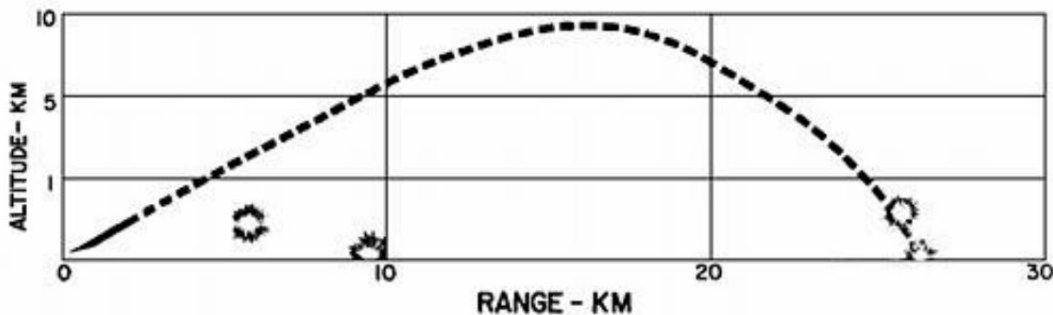
Honest John rocket M50.

From Saturn Press, Unpublished Drawings.

It appears that the practice rockets used in Denmark were painted in a dark color - in something similar to the "Army's normal color" - while the specimen on display today at Tøjhusmuseet appears in a more greenish paint .

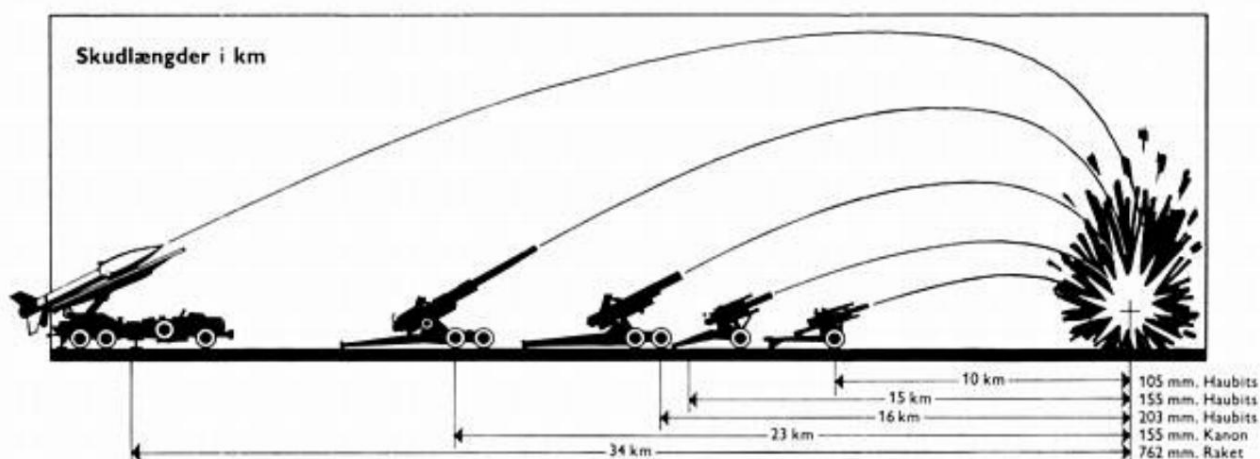
The M31 version used a rocket engine with the designation MGR-1A, while the M50 version used a rocket engine with the designation MGR-1B. (Source 11)

However, available images only show rockets with large control fins, i.e. the M31 version.



Distance sketch - Honest John M31.
From Source 7.

When the chart below indicates the range of the rocket to 34 km, it may indicate that the sharp rockets that were available in Denmark were of the latest M50 version. It is therefore likely that rockets of an older model were used for training purposes, while the latest model was obviously intended for use in wartime.



Form from *Basic Book for the Army's privates*, Ministry of Defence, Copenhagen 1969.



762 mm Honest John rocket before dismantling from the launch pad, after the parade and official handover to Denmark on 8 April 1960.

From Carl Bjerre via Brian Brodersen.

In this connection, it must be remembered that the rockets that were used during training, and arguably also sharpshooting in Denmark, were practice rockets with a reduced explosive charge.

Source 4 mentions that the practice rockets were equipped with one rocket motor and a small charge for marking. When firing at targets on the lake, it was achieved that the tube itself with the rocket engine fell into the sea, whereby this, the most expensive part of the rocket, could be reused.

Rocket heads

Basically, there were four different types of *warheads*, in a number of different types:

Table 5: Rocket warheads (Primarily from Source 11)

Flash Conventional rocket head for practice use.

Smoke

High Conventional rocket warhead with explosive charge.

Explosive

Chemical Unconventional rocket head with e.g. the nerve gas *Sarin* 9).

Blast Conventional rocket warhead that could be equipped with an unconventional W-7 10) nuclear warhead using an M57A1 adaptation kit. (Source 7)

Examples of types

FS M4 and FS M38

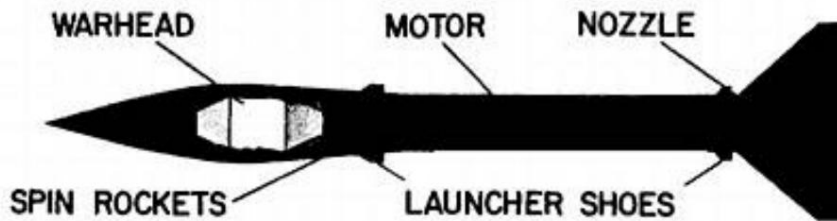
HE M6 and HE M57

GB M190

As far as is known, *Flash-Smoke* is the only type of rocket head that has been used in shootings in Denmark. (Source 9)

It must be assumed, however, that the conventional rocket heads with high-explosive charges have been obvious in Denmark for use in wartime.

HONEST JOHN M31



LENGTH - 327"

WEIGHT - 5,900 LBS.

DIAMETER - 762 MM

PAYLOAD - 1,500 LBS.

THRUST - 92,500 LBS.

Honest John rocket main parts and data.
From Source 7.



762mm Rocket Guide M289 Va Honest John.

From *Textbook for the Army's privates*, Hærkommandoen, Copenhagen 1962.

Shooting



Measurement of the shooting position.

From Jesper Vilhelmsen via Ole Willumsen.

It took up to 30 minutes to prepare a rocket for firing. One naturally worked to reduce this time, when the rocket was free in the open field, and extremely vulnerable to enemy air attacks.

Procedures were developed involving preparing the rocket in a secured "loading point" from which the rocket guidance moved to a "lurking position" near the firing position itself.

As charging points and nap positions, you could, among other things, use large chargers.

The instrument in the center of the picture is a protractor.



762 mm rocket launcher M289 Va Honest John, in nap position.

From Jesper Vilhelmsen via Ole Willumsen.

When the order to fire came, the lurking position was moved to the firing position, where it took 10 minutes to make the final preparations for firing.

Skirmish and effect

By traditional artillery standards, the precision of the rockets was so-so. The spread was large, and only 50% of the shots fell within a radius of approx. 300-400 meters from the target, while with conventional heavy artillery with a similar range, a skirmish of 50% was expected within a radius of approx. 40 meters.

A conventional Honest John rocket had an effective radius of approx. 150 meters from the impact site. In comparison, the effective radius of the artillery shell is approx. 90 meters.



Preparation of 762 mm rocket guide M289 Va Honest John, Nymindegab Camp, 1966 11). ____

When you consider at the same time that the shot cadence for an Honest John rocket guide was 2 shots per hour, the end result is, all in all, a not very effective weapon, with conventional ammunition understood.

In an overall assessment of the effectiveness of the weapon system, however, one must consider that the rocket was rather intended as a delivery system for tactical nuclear charges, where precision in the skirmish did not play a major role, rather than a conventional explosive charge. Conversely, the weapon system was relatively more mobile than concurrent heavy conventional artillery with the same range.

Closing



762 mm rocket launcher M386 Va Honest John in service with Nørrejylland Artilleriregiment. From Brian Brodersen, who cites the regimental *magazine Lavetten* (1969) as a source.

About the end of the story I don't know very concretely at the moment, but the 9th Artillery Division, one battery of which belonged to the covering force, while the other was a mobilization unit, was disbanded on 18 April 1972 due to a lack of conscripts.

In the autumn of 1973, the Honest John rocket system was mothballed, and later handed over to Turkey [12](#). ___

I am not aware of what happened to the Zealand Artillery Regiment, and if anyone knows this part of the story, I would like to hear about it.

The Honest John "project" was officially ended on the American side on 9 July 1982, and both the rockets and the associated equipment were then classified as obsolete. (Source 6)

Table 6: Honest John missile guidance in NATO forces (Source 8)

Distribution per June 1965	M289	M386
Belgium	12	0
Canada	0	6
Denmark	4	4
France	16	4
Greece	8	0
Italy	16	0
The Netherlands	12	0

United Kingdom	0	14
Turkey	16	0
West Germany	2	86
Total	86	114

The Honest John missile system in NATO

It should also be mentioned that the Honest John system went to the defense of other NATO countries roughly at the same time as its introduction in Denmark.

Per June 1965 the distribution was as indicated in Table 6.

At this time, the American forces in Europe had a total of 88 units. M386 Honest John rocket guidance.

Sources

1. *Artillery in Denmark* edited by Marian Plough, Varde Artillerimuseum, 2001, ISBN 87-89834-39-9.
2. *The field artillery in Aarhus 1881-1969* by PE Niemann, Forlaget ZAC, Copenhagen 1981, ISBN 87-7348-047-9.
3. *The Army's Artillery School 1923-1993*, Danish Artillery Journal No. 1, February 1993.
4. *An intermezzo in Artilleriet* by Major Uffe Smistrup, Danish Military Historical Vehicle Association Nr. 53, December 2003/January 2004 (pages 3-8). Supplementary image material is included in the same magazine's No. 55 April/May 2004 (pages 7-8).
5. Honest John (Danish Army Vehicles Homepage).
6. Honest John (Redstone Arsenal Historical Information)
7. History of the Basic (M31) Honest John Rocket System (Redstone Arsenal Historical Information) 13).
8. History of the Improved (M50) Honest John Rocket System (Redstone Arsenal Historical Information)
9. Experiences from the time at the Honest John rockets, 1959-1962, told by Jørgen Hansen to Per Finsted, April 2006.
10. Experiences from the time at the Honest John rockets, 1964-1966, told by Ole Ohlsson to Per Finsted, April 2006.
11. *Draft for the Service in the Field at the Rocket Battery*, Army Inspectorate, 1967.
12. *Preliminary Directive for Annual Alert Test (AAT) at Honest John Battery*, Army Inspectorate, 1970.
13. *Provisions for Preparation of firing reports 762 mm Rocket Honest John*, Army Inspectorate, 1968.
14. *Organizational allocation for 1st and 2nd echelon Launcher, 762-mm rocket, truck mounted, M289 (Honest John)*, Defense Materiel Administration, 1961.
15. *Handbook for Generator Unit 3.5 kW 75 Hz, M 25 (Honest John)*, Army Technical Corps, 1962.

Thanks

Without the willing assistance of Henrik Teller (Danish Army Vehicles Homepage), Ole Willumsen (editor and webmaster of the Danish Military Historical Vehicle Association) and Brian Brodersen, it would not have been possible to provide such extensive image material. I thank you for your interest, various information and not least the image material.

I would also like to thank Jørgen Hansen and Ole Ohlsson for sharing their memories of dealing with the rockets. Should anyone among the readers have additional information and photo material, I would like to hear about it.

Per Finsted



Image cavalcade - Honest John rocket launchers and rockets.

From Jesper Vilhelmsen via Ole Willumsen.



762mm Rocket Guide M289 Va Honest John.

From Source 14.

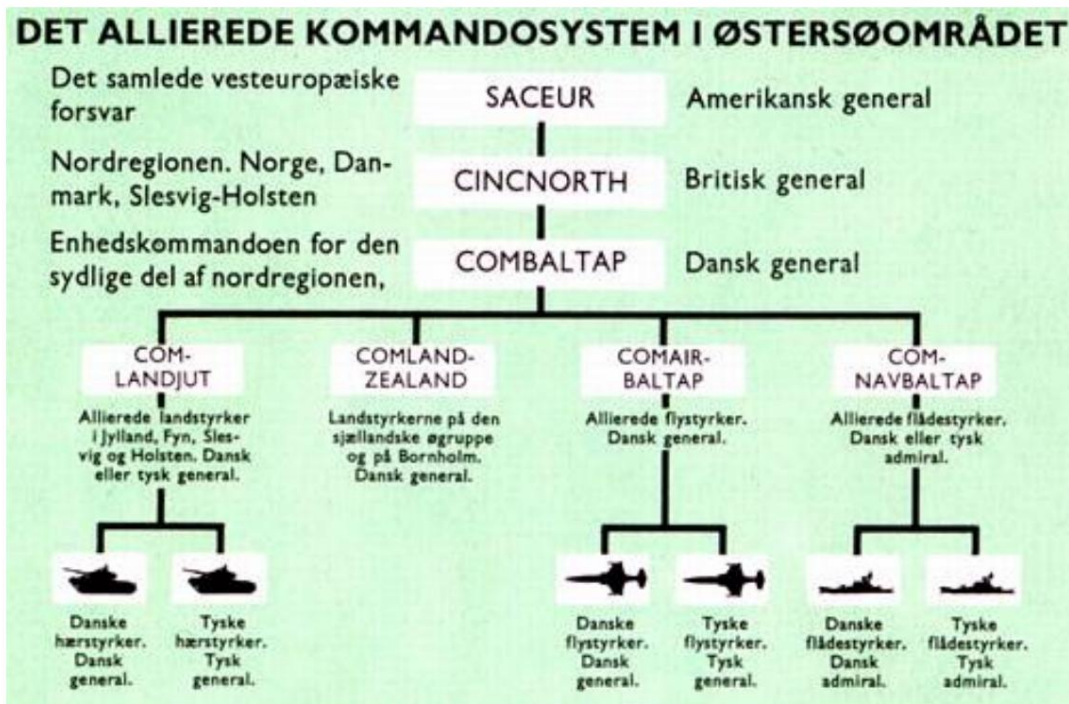
Postscript - On Danish nuclear weapons policy etc.

The Danish nuclear weapons policy has been described as *a policy of the utmost flexibility* [14](#), where successive governments balanced different domestic and foreign policy considerations, which on the one hand allowed the presence of weapons systems that could deliver nuclear charges, and the training of officers on

high level of use 15), but on the other hand did not allow the presence of nuclear weapons on Danish soil in peacetime.

Over time, much has been said and written about this issue, including the special circumstances surrounding the American placement of nuclear weapons in Greenland 16).

For clarification of Danish nuclear weapons policy, it is useful to read Denmark's nuclear weapons policy during the Cold War by cand.scient.soc. Mads Løkke Rasmussen (Source 16). The thesis, which has the subtitle "- with a special view to the issue of the deployment and nuclear arming of American Nike Hercules rockets on the Thule base and around Copenhagen", peripherally touches on the Honest John system, but stands out in particular as good background knowledge for understanding the background of why Denmark introduced the American missile systems.



The allied command system in the Baltic Sea area.

From Basic book for the army's privates, Hærkommandoen, Copenhagen 1969.

What if...

Had it come to the point - under the prospect of war or a threatening breach of peace - that the Danish government had decided that it would ask NATO to hand over nuclear warheads for rockets and/or nuclear munitions for the heavy field artillery, and had the American president approved the deployment of such types of ammunition in Denmark, the delivery procedure could have been as described subsequently.

Before describing the procedure, it may be advantageous to study the command system for NATO in the Baltic Sea area, as the allocation would have followed this structure.

Possible extradition procedure for nuclear weapons

1. The permission would, through the command system, have gone to the Unit Command (BALTAP, *Baltic Approaches*). Here there was a special nuclear planning cell under an American officer with the necessary means of communication so that the process could proceed quite quickly. (Source 16)
2. The unit command then provided nuclear weapons in accordance with the allocation, and the doctrine in force at the time in question.

In the case of a tactical exercise on paper, it could e.g. concern five nuclear weapons in the order of 1 to 10 kilotons for the defensive battle on Zealand. The weapons could e.g. be used in anti-invasion defence. (Source 16)

3. In depots located around the town of Meyn near Flensburg in Germany, under the auspices of the 294th US Army Artillery Group, which was part of the 59th Ordnance Brigade, i.e. nuclear warheads for rockets and nuclear ammunition for the artillery, with a view to possible delivery to the 6th (German) Division, which was under the command of COMLANDJUT. The *99th Ordnance Detachment* served LANDJUT (*Landforces Jutland = Allied Land Forces in Jutland, Funen, Schleswig and Holstein*), while the *75th US Army Field Artillery Detachment* served the 6th (German) Division.

See Special Weapons Depots (59th Ord Bde) and 59th Ordnance Brigade (US Army, Europe).

4. From the depots, the atomic munitions could - within 24 to 48 hours - be transported to Denmark per helicopter, plane or on lorries, and handed over to the Danish defence. (Source 16)

CH-47 Chinook 17)___

Diameter of the rotors 18.3 m

Length 30.1 m

Height 5.7 m

Take-off weight 12.1 tons

Maximum speed 295 km/h

Practical top 2,590 height

Flight time 7 hours

Load capacity 10,5 tons



CH-47 Chinook, approx. 1967.

From the Veterans History Project (Library of Congress).

It is likely that US officers - and perhaps crew - would have accompanied the munitions so that US control of the munitions could be maintained.

Jørgen Hansen mentions thus (Source 9): I believe that the plan was for the heads to be delivered by a special team of American personnel who were cleared and trained to "handle" these A heads.

It was surrounded by a lot of secrecy, and we knew that if we did, we wouldn't get any insight into how it was done.

Helicopters of the type CH-47 Chinook could be used for the transport. The helicopter was the standard transport helicopter in i.a. the US Army from the mid-1960s.

5. At one or more agreed points, Danish units would then receive the munitions that followed could be handed over or posted.

Draft of the Service in the Field at the Rocket Battery (Source 11) mentions the following in the section on the battery's "Task and organization": "The rocket battery is responsible for its own close-in security, which if possible is established in connection with neighboring units or regional units. The battery does not have special security personnel and must therefore - when the battery has been handed unconventional rocket heads - be reinforced with personnel to secure these."

6. What could have happened next is, for good reasons, not known...

However, Source 11 mentions in the section "Certain duties and responsibilities" the following under the battery commander: "If possible, he personally checks the side and height position before the launch of rockets that are equipped with unconventional rocket heads."

Training business

However, nuclear weapons were not included in the operational plans for the defense of Danish territory. It was therefore unknown how many nuclear weapons would be made available and when, this could happen, just as there was a belief that the first phase of the defensive battle would be conducted with conventional means, so that it would be possible to incorporate the use of tactical nuclear weapons in the planning. (Source 16)

- Ole Ohlsson, who was second-in-command of an Honest John battery 1964-1966, is quoted in Source 17 as saying the following: "I remember an exercise in Zealand where we carried out the entire delivery procedure. The helicopter pilot landed on my instructions at an intersection we had staked out and I had brought some vehicles and a crane to receive the warheads. It was a demonstration that you could get that far during the exercises."
- Major Uffe Smistrup is also quoted in Kilde 17 for the following statement (to the *Jyllandsposten*): "We always practiced as if they were nuclear charges to be launched. We were never told where they were going to come from, but we were convinced that, that they would probably be there if necessary."
- In Kilde 4, Uffe Smistrup writes: "It was during this (= a mention of a series of shorter and longer exercises) training that we realized that it was not rockets with high explosives that we had to fire. Firing was always practiced of nuclear missiles. The fact that we didn't show much about the preparation of such ones didn't mean anything. There couldn't be much difference. We didn't really think much about it at the time, but later we probably all made up our minds. We knew so little about these things—far less than the youth of today."

After the fall of the Wall in 1989, it has emerged that the Warsaw Pact operated with the use of nuclear weapons against Denmark in an early phase of a war, and it is also worth noting here that the Danish potential delivery systems for nuclear weapons - Honest John and NIKE Hercules rockets - would naturally have been priority targets prior to an attack. (Source 16)

Supplementary sources

1. Denmark's nuclear weapons policy during the Cold War - with a particular focus on the question of deployment and nuclear arming of American Nike Hercules rockets on Thule base and around Copenhagen by cand.scient.soc. Mads Løkke Rasmussen.
2. Atomic missiles were ready in Germany, *Dagbladet Arbejderen*, 24 December 2004.



762mm Rocket Guide M289 Va Honest John.
From Source 14.

Notes:

- 1) Va = carriage allowance. US Designation: *Launcher, 762mm Rocket, Truck Mounted, M289 (Honest John)*.
- 2) Mentioned in *Draft for Service in the Field at the Rocket Battery*, Army Inspectorate, 1967 (Source 11).
- 3) The photograph originates from Sergeant Carl Bjerre, Zealand Artillery Regiment. From Brian Brodersen via Henrik Teller.
- 4) The wagon train with rocket wagon and rocket trailer was 18 m long, and was popularly called a *longjohn*. (Source 10)
- 5) The later Sergeant Carl Bjerre was in 1960 math and head of the wind measurement section in 1st Half Battery, 1st Battery, 4th Artillery Division. The food scheme was introduced with the Defense Act of 1951, and was a precursor to the later constable scheme, which was introduced with the Defense Act of 1960.
The leaflet "Before the session" (approx. 1955) informs, among other things, the following about the math system: "In addition to the conscripted privates... the army also uses permanently employed privates, who are called mathers. Mathers are used in particular to operate the more complex military equipment, which requires special special training and longer practice than can be given to the conscripted privates . For example, mathers are used as tank drivers, radar operators, radio telegraph operators and as permanent engine drivers..."
See also the Tøjhusmuseet's online exhibition on recruitment Our time's enlisted soldiers, in which degree marks for maths and maths students are also reproduced, as well as examples of various recruitment brochures.
- 6) *Truppenübungsplatz Grafenwöhr* is the largest military training area in Western Europe, and has functioned as such since 1908. See e.g. *Truppenübungsplatz Grafenwöhr (Bayern heute)* and *Grafenwöhr* (Wikipedia).
- 7) The first Danish demonstration against nuclear weapons also took place in Aarhus Harbor in August 1959, where the first NIKE anti-aircraft missile material was discharged. See *Anti-nuclear protest campaign* (Dictionary for the 21st century)
- 8) The white-painted steel helmets seen in several of the other photographs may have fallen out of use later. Bjarne Jørgensen, Viby Sjælland, artilleryman in Holbæk in 1967-68, has stated that "white helmets were not used in

his time".

9) See Sarin (Wikipedia). There were also warheads with a newer type of nerve gas - V-type volatile nerve gas. In 1967, this warhead was designated VX M190, where the x indicates that it is a model which is still at an experimental stage. (Source 11) On nerve gas, see also *Protective means against Atomic, Biological and Chemical Warfare* by lieutenant colonel AV Skjødt, formerly of the Norwegian Armed Forces' ABC service. Booklet from the Tøjhusmuseet's special exhibition 30 November 1990 - 28 April 1991, Copenhagen 1990.

10) *The W-7* nuclear charge was in use from 1954 to 1960, when it was replaced by the *W-31*, which was in use from 1961 to 1985. Source: List of nuclear weapons (Wikipedia). The nuclear charges' data appears in the Complete List of All US Nuclear Weapons (Nuclear Weapon Archive).

11) From *Grundbog for Hærens menige*, Ministry of Defence, Copenhagen 1969. Major Teddy Børgesen states in Memories from 1966 (Danish Dragon Associations) that the photo was taken in Nymindegab Camp, in 1966.

12) From *the Nørrejyske Artillery Regiment in Skive 1969-2000* by Otto Siggaard, The Queen's Artillery Regiment's Artillery Museum Support Association, Varde 2004. The information has been passed on by Brian Brodersen.

13) This official report can be nicely combined with information about the American use in Europe - see Field Artillery in the European Theater. A further organizational perspective is found in: *Maneuver and Firepower - The Evolution of Divisions and Separate Brigades* (United States Army).

14) *A Policy of the Utmost Flexibility - Danish Nuclear Weapons Policy 1956-1960*, Jonathan Søborg Agger and Lasse Wolsgård (Historical Journal).

15) Garrison library's review of *The massive retaliation's little echo - The role of tactical nuclear weapons in Danish defense planning in the 1950s* by Michael Clemmensen, pages 121-146 in *Denmark, the Nordic countries and NATO 1948-1962* by Carsten Due-Nielsen et al. (ed.).

16) See *Greenland during The cold War: Danish and American Security Policy 1945-68* (Danish Foreign Policy Institute).

17) Data from CH-47 Chinook (Wikipedia).