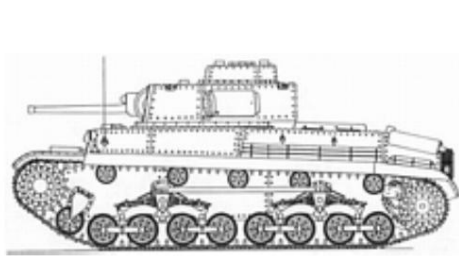


# Hungarian tanks

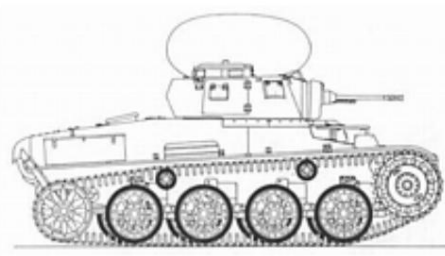
## 1. Introduction

My Hungarian army has now been supplemented with an armored battalion. I have chosen to set up the battalion in a reduced form, so that it fits more with my other Hungarian units than showing the battalion at full strength. The result is a handy little device that I'm looking forward to trying out in a game.

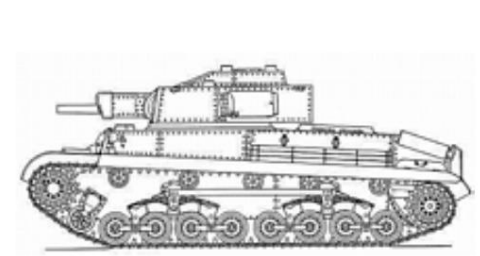
When you read about the number of tanks available at different times of the war, the reduced armored battalion gives a pretty good representation of actual Hungarian armored units.



*Turán I*



*Toldi I*



*Turán II*

This article is divided as follows:

1. Introduction, my plan for setting up the battalion, a mention of the models, a brief historical background as well as sources and opportunities to find further inspiration.
2. Pictures of the finished models and figures.
3. Wargame organization and weapon data.

## 2. My plan

To display my Hungarian Panzer Battalion I listed the following needs which could be met using models from Cromwell Models:

Number	Catalog	Type	Price in £	Usage
3	CRH01	Hungarian Turan I Tank	8.50	Medium tank company + chief tank
2	CRH02	Hungarian Turan II Tank	8.50	Heavy tank company
1	CRH04	Hungarian Toldi I Tank	6.75	Reconnaissance tank
1	CRG37	German SdKfz 11 3 ton Half Track	6.75	Recovery vehicle

The recovery vehicle may not have been strictly necessary as such are rarely used in our game. However, I was inspired to make the model when I found a picture of a semi-tracked vehicle of this type pulling a Toldi tank - so it was obvious to show the battalion's recovery squad in this way.

### 3. Models

#### 3.1 Cromwell Models Combat Ready series

The models mentioned here are all from the Cromwell Models Combat Ready series. All the models are cast in resin accompanied by very few loose parts - turret, turret hatch and movement. Again, the casting technique calls for great admiration - a complete undercarriage, including tracks, wheels and support rollers, on which only the tower has to be mounted. A treat for a wargamer who thus avoids having to glue a hundred small parts together to get a tank out of a construction kit. From a modeling point of view, the result is also fully satisfactory, with a sufficient level of detail to give a believable result.

Cromwell Models: <http://www.xs4all.nl/~cromwell>

However, the vehicles were purchased from <http://www.fandsscalemodels.co.uk/index.htm> as Cromwell Models did not bother to reply to my repeated emails.

#### Verdict:

Cromwell's models in this series are as always finely cast, but have two weaknesses; the tank guns and turret hatches. As both parts are cast in resin, they are very fragile.



*Turán I*



*Toldi I*



*SdKfz 11*



*Turán II*

On the Modeling in Miniatures website you can see pictures of the raw building sets

Toldi I Turan II



*Turán I*

In pictures of the Turán tanks, you can see something white behind the road wheels. It is the result of a little too eager work with my new drill. I mistakenly assumed that there was "air" between the bottom of the tank and the road wheels, which upon closer study of the sources turned out to be incorrect. The cure was that I glued a small piece of paper behind the road wheels. On the painted models, the error is no longer visible.

The white piece of plastic above the road wheels connects the bogies. The connecting piece was not part of Cromwell's model, so a thin piece of plastic has been used for the purpose.

## 3.2 Figures from Milicast



The tank commanders are from the Milicast - set FIG 33 *Italian AFV Crew*. Although thought of as Italians, the figures look quite similar to Hungarian tank crews who, among other things, used Italian and Italian-inspired uniforms. The set contains five figures cast in resin - in the same style as the Russian armored soldiers I have previously reviewed. Of the five figures, there is only one that cannot be used as Hungarians; he is wearing a tropical helmet, and thus must wait until operations in warmer climates become interesting.

Two of the figures have become "busters".

Their positions (one standing, arms out to the side, the other a torso) didn't make them immediately usable for the relatively narrow turret hatches on my tank models.

The result was therefore that the tank commanders just now have their heads out of the turret hatches.

Milicast: <http://www.milicast.com/index.html>

### Assessment:

The figures are well-proportioned and neatly cast, largely without burrs. The fact that some of the positions were not applicable for my purposes cannot be blamed on the manufacturer.

## 3.3 Transfer Images

The tanks have decals from the American company Aleran Miniatures (18530 Mack Ave, #424, Detroit, MI 48236, USA), which among other things produces a sheet with Hungarian and Romanian marks.

Aleran Miniatures: <http://www.figuresarmourartilleryusa.com> (see *Decals*)

The transfer images come with excellent instructions on how best to put them on the models.

### Assessment:

The transfer images are very fragile and it is wise to follow the instructions. Furthermore, I found that one of the pictures was almost dissolved by the matte varnish that I painted on top of, after mounting. It looked interesting, but was a completely redundant experience!

## 4. Hungarian tanks

Like much other military equipment in the Hungarian army, there were also too few tanks. The quality, including not least the armament, was not up to date. *Too little and too late* is a pretty good summary of the situation.

#### 4.1 Light tank 38.M Toldi

Tank 38.M Toldi was built under license from the Swedish factory Landsverk (model L-60). The tank was also used in the Swedish army - under the designation Stridsvagn m/38.

The tank was available in three different versions, respectively named Toldi I, II and III. The first two were equipped with a 20 mm machine gun, while the last one was equipped with a 40 mm gun. The first tanks entered service in April 1940; the last were delivered during 1942.

Production numbers Canon		
Designation		Remarks
Toldi I	80	20 mm
Toldi II	110	20 mm <i>Around 40 Toldi I and II were equipped in 1943 with the same cannon as the Toldi III, New designation 38.M Toldi IIA.</i>
Toldi III	12	40 mm

#### 4.2 Medium tank 40.M Turán I and heavy tank 41.M Turán II

The Hungarian General Staff recognized the need for a medium-heavy tank. After unsuccessful negotiations with Germany and Italy, they turned their attention to Czechoslovakia. From here, in August 1940, the production rights were obtained for the Skoda factories' T-21 tank, whose undercarriage is in many ways reminiscent of the Skoda tank, which was known in German service as the Pz 35(t).

Two prototypes were shown in July 1941 and the first series-produced tanks were delivered in June 1942. The tank was named Turán after one of the peoples to which the Hungarians attribute their origin.

The battles on the Eastern Front made it clear that a 40 mm gun was not sufficient and it was decided to equip the tank with a 75 mm gun. The first Turán II tanks were delivered during the summer of 1943. The gun was a short 75 mm gun. The inspiration may well have come from the equivalent German Pz IV tanks, although the Germans had already recognized that a short gun was not effective enough.

The Hungarians quickly came to the same realization and it was decided that a 105 mm gun would be the right caliber. In June 1944, four prototypes of the Turán III were presented, which were equipped with a 105 mm cannon. Due to the Allied bombing of Hungarian heavy industry, this tank never went into production.

Production numbers Canon		
Designation		Remarks
Turán I	285	40 mm <i>In 1944, the tank was named Turán 40.</i>
Turán II	139	75 mm <i>In 1944 the tank was named Turán 75.</i>

#### 5. Sources

1. *The Royal Hungarian Army, 1920 – 1945* by Leo WG Niehorster, Axis Europa Books, New York 1998, ISBN 1-891227-19-X.

2. *The Royal Hungarian Army 1920-1945, Volume II, Hungarian Mobile Forces* by Peter Mujzer, Axis Europa Books, New York 2000, ISBN 1-891227-35-1. (Kindly lent by Peter Gjørtler)
3. *Hungarian Armored Vehicles in WWII*, Modell és Markett Magazin Extra No. 5/1998
4. *The Eastern Front, Armor Camouflage and Markings, 1941 to 1945* by Stephen Zaloga and James Grandsen, Arms and Armor Press, London 1983, ISBN 0-85368-583-5.
5. *Axis Allies on the Eastern Front* by Bob Mackenzie, Tac Publications, Oxford 2001.

## 6. Read more and see pictures here

About Turán I and II and links to other types: <http://www.wwiivehicles.com/html/hungary/turan.htm>

About Hungarian armored vehicles: <http://mailer.fsu.edu/~akirk/tanks/hun/Hungary.html>

### 6.1 Tanks in museums

The Russian tank museum Kubinka has a copy of all the Hungarian tanks. As far as is known, there are not many others in the world. I have not seen the tanks myself, but only pictures of them. Painting and marking are not correct.

In our latitudes, you can see a copy of the Stridsvagn m/38 (the Swedish version of the Toldi tank <http://www.algonet.se/~toriert/nr9.htm>) at the Swedish Armored Museum in Axvall. I highly recommend a visit to this museum. It's not big and flashy, but still contains material for several hours of study - and then you have to touch things! See the museum's website here: <http://www.algonet.se/~toriert/axvall.htm>.



## 7. Pictures of the finished models

### The battalion commander's Turán 1 tank

As a guide vehicle, it is equipped with two radio antennas.

Whether the tank commander takes to his head over a bad roll of the dice must depend on a test - more likely, however, is that he shouts a command.



### **Reconnaissance tank Toldi I**

I couldn't stand the frame antenna on this tank - it had to be made! The hairs on my broom - the usual universal solution - were not long enough, so I had to resort to other means. A frame antenna from a Premo 1:87 model of a Russian tank had to do. The antenna is made of a flexible plastic material that makes it bendable.

The coaxial machine hub was missing from the model, so a small piece of plastic was used instead.

The tank commander was left over from one of my Zrinyi 105 assault guns from Small Scale Productions. The figure is a bit smaller than the Milicast figures, and therefore fits well with this small tank.



### **The role model!**

During the war, the oval frame antenna was replaced by a rod antenna. Judging by the available image material, the old type was used as late as 1944.

On the prototype, the antenna could be laid down - over the tower. It got too complicated at this scale, so my antenna is glued.





### Recovery vehicle SdKfz 11

The whole model is a casting - impressive and very satisfying, especially as the alternative from Revell (the former Matchbox model) consists of approximately 60 small parts that need to be glued together!

In Hungarian service the vehicle was designated the 37.M Hansa Lloyd, and was mainly used as an artillery tractor for 10.5 cm light field howitzers (the familiar German version).

Why isn't this model camouflaged when the battalion tanks are? As far as I can tell from pictures, "soft" vehicles were more often in the greenish factory paint than in the blur paint.



The image that inspired me for my recovery vehicle.

The operation in the picture was not entirely successful, as the soldiers eagerly studying the material are Russian and not Hungarian!

However, it is not known whether the vehicle was actually a recovery vehicle, or Hungarian for that matter. But I have chosen to consider it a Hungarian recovery vehicle.



Inspired by the above photograph, it was obvious to take this picture. The mechanic is an Airfix figure, from *the RAF Refueling* set.

I chose the factory paint job for the recovery vehicle partly to give a little contrast to the tanks and partly because the vehicle is also intended for an alternative function as a gun tractor. In the latter function, it would not fit in blur painting.



The heavy version of the Turán tank - Turán II, or Turán 75, as it was later called.

The tanks make up the heavy tank company (1st Company).



The medium heavy tank Turán I, or Turán 40 as it was later called.

The tanks make up the medium tank company (2. Kompagni).

The hatches on the models were rather fragile; when the originals broke, plastic sheet was again the good alternative. This solution is not seen on the finished models.

As mentioned, the tank guns are very fragile, but they must now hold on as long as they can.





The figure's function in war games is as detached crew (= patrol) for the reconnaissance tank.

In more peaceful conditions, the figure should be used as a battalion commander.

I was inspired to paint the figure with the black leather jacket from various pictures of armored soldiers - well, they showed pictures of the crew of a Nimrod anti-aircraft tank, but the figure's long jacket was perfect for the purpose.

### 7.1 Painting of tanks and uniforms

I have used the same methods and colors as stated in my article on the Zrinyi 105 assault cannon.

Just like the storm cannons, there is also the option of painting the tanks - either green or blue painted. I chose the last option, as I find it more interesting and, in my opinion, characteristic of Hungarian armored vehicles.

## 8. War Games Organization



*The battalion's tanks salute the commander.*

### Armored Battalion (-)

Battalion Chief:  
Turán I, chief

Staff company:  
Toldi I  
Engineer

1st Company:  
Turán II, command division  
Turán II

platoon Truck, medium  
anti-aircraft tank Turán I, 2nd Company: Nimrod  
command platoon Recovery vehicle

In relation to my plan, I now need to supplement the battalion with a Nimrod anti-aircraft tank. Søren Juul has written an article about S&S Models' version of this vehicle. Unfortunately, however, it seems that this model is no longer in stock, so I will investigate the market's other options to fulfill my need.

Furthermore, I currently need to make the battalion's engineer division and their truck. I think the necessary "recruitment base" is present in the inventories - I just need to decide which figures to use. But more on that on a later occasion.

## **9. The armored battalion's data converted to the Command Decision rules**

v,jbkbhj

Per Finsted

## Wargame Organization:

### Armored Battalion (-)

**Battalion Chief:**  
 Turán I, chief

**Staff company:**  
 Toldi I (*reconnaissance, own command*)

Engineering division  
 Truck, medium-duty  
 Nimrod anti-aircraft tank

Recovery vehicle

(S = HEAT)

**1st Company:**  
 Turán II, command division  
 Turán II

**2nd Company:**  
 Turán I, command division  
 Turán I

(S = HEAT)

### Tanks

**HE:** Explosive ammunition  
**AP:** Armor-Piercing Ammunition  
**HEAT:** Super armor ammo

**B:** Bowgun  
**T:** Turret gun  
**Px:** Deduction for shooting at personnel  
 Open vehicle

Vehicle/Weapon	Class	Crew	Engine	Fuel	Armor	Weight	Distance (shot distance - breakthrough factor)				P	Pp	Pv
							Probability of Skirmish						
							7	5	3	1			
Toldi I T: mg	III 1	15/75	2/1	20	3 AP/HE	25:3	50:-4	75:-5	100:-6	P-3	--	--	
Nimrod	IV 1	15/75	1/1a	30	3 AP/HE	25:1	38:0	62:-1	100:-2	P-1	--	--	
Turán I T: mg, B: mg	IV 1	15/62	5/3	20	3 AP/HE	25:1	38:0	62:-1	100:-2	P-3	--	--	
Turán II T: mg, B: mg	IV 1	15/62	5/3		11 2	HE	12:-3	25:-3	50-3	75:-3	--	3 cm/4	
						AP	12:1	25:1	50:0	75:-1	--	--	

### Other wheeled and tracked vehicles

Vehicle	Class	Crew	Engine	Weight
SdKfz 11	III 1	13/75	2/IV	--
Truck, medium heavy	III 1	75/38	2/III	-- MG (vehicle)

### Small arms and heavy infantry weapons

Type	Crew	Engine	Distance (shooting distance - breakthrough factor)			
			Probability of Skirmish			
			7	5	3	1
Engineers			1 SA BK 12			25 38
			1 SA	--	12	25 50