

T-54 tank in Syria

A MISTER X DOCUMENT



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Introduction

The T-54 is a Soviet tank first manufactured in 1948. It is widely used by Warsaw Pact countries as well as by allies of the USSR throughout the fifties and sixties. It was mostly replaced by the very similar T-55 in most countries. In the case of Syria the T-54 was the workhorse of the army, especially during the Six-Day War (1967) and to a lesser extent during the Yom Kippur War (1973).

According to SIPRI, T-54s were supplied to Syria in a series of orders spanning three decades: 1957-1958 (150 T-54s), 1967-1972 (300 T-54s) and 1973-1978 (400 T-54s). Combined these orders total to 850 tanks, of which 700 (in the last two shipments) were second-hand. Many of these tanks were lost in external and internal conflicts such as the Six-Day and the Yom-Kippur wars. In fact Israel captured so many T-54s and T-55s from Syria that it incorporated them in its army under the name Tiran 67 (those captured in the 1967 war) and subsequently as the Tiran-5. Other than combat losses of T-54s, Syria donated 180 T-54s (some of those were T-55s) to the Lebanese Army in 1992 and 1993 (the actual deal was signed in 1991) according to SIPRI.

Looking at the tank's armament, the T-54 uses the D-10 100 mm rifled gun (as does the T-55). The DShK 12.7 mm is the standard "commander" machine gun mounted on the turret. The T-54 is also equipped with a WWII era SG-43 Goryunov coaxial machine gun. There have been no photos from Syria of the SG-43 mounted in the coaxial role. However, it is still possible that the SG-43 may be mounted on a T-54 in reserve with SAA.

T-54s in Syria rarely have a "commander" machine gun installed. This is likely due to the T-54 largely being a reserve tank in the SAA prior to the start of the civil war. The DShK machine guns were likely removed and put to use elsewhere rather than left attached to the tank during his reserve time.



Some SG-43s that someone attempted to smuggle from Egypt to Gaza

How to Distinguish the T-54 From the T-55

Distinguishing the T-54 from the T-55 is not easy. There is only one clear difference. There is a "dome" on the T-54 that is not present on the T-55. This dome was probably removed because it presented a weak point on the front of the turret. The T-54-3, an older variant of the T-54, is also present in Syria. It is easy to distinguish the T-54-3 from other tanks because there is no fume extractor at the end of the barrel of the main gun.



The dome that identifies a T-54 vs a T-55



On the left is a T-54-3 in Aleppo. On the right is a tank with a fume extractor from the capture of the infantry academy in Aleppo City.

Initially the T-54 used the same type of “radial-style” wheels as those of the T-34s. Around the same time the T-55 was introduced into the Soviet army, the “radial-style” wheels were replaced with a more modern variant.



The old “radial-style” wheel on the T-34.

The “radial-style” wheel was not fully replaced in Syria and many T-54 tanks still have that style of wheel. While some T-55s in Syria have been spotted with “radial-style” wheels, the vast majority of “radial-style” wheels are seen with T-54s. “Radial-style” wheels were likely in storage with the SAA prior to the war and were used to replace damaged wheels as the SAA ran out of modern wheels as the war dragged on.



A T-54-3 making a turn in Syria. Note that the three central wheels are the old radial type, although this feature is not 100% proof that a tank is a T-54, it is one clue suggesting that it may be a T-54.

Moving on to other T- 54 variants, we have the T-54A. The T-54A is the most common T-54 variant in Syria. Unlike the T-54-3, the T-54A has a fume extractor at the end of the main gun barrel. This characteristic is shared with the T-55, making the T-54A somewhat harder to identify.

Finally there is the T-54B, this variant has most of the improvements of the T-55A (i.e. optics). The only difference between the T-54B and the T-55A is again that characteristic "dome". There is another variant called T-54M, but externally it is undistinguishable from the T-54B. The T-54M has several internal improvements in ammunition storage and the power system. The T-54B or M sighted in Syria is going to be called T-54B/M in this article.



T-54-3 of the FSA 15 September 2013, Aleppo. This T-54-3 appears in a lot of photos and was captured by the rebels at the Aleppo Infantry Academy during December, 2012. Note the lack of a fume extractor on the barrel.

The infrared searchlight on the T-54B is called "Luna" (L2). "Luna" in Russian means "moon" precisely because it allows the tank to see in the dark, like the full moon during the night.

Where the T-54s Were Found in Syria

The vast majority of the T-54s in Syria were found in Aleppo Governorate, with the first T-54 being captured by rebels there in December, 2012. In fact there are very few pictures of T-54 tanks outside the province. While there are a few T-54s in Damascus, Deraa, Idlib and Raqqqa governorates, they will be covered later on in the article.

On December 16, 2012 (still at an early stage of the conflict) after heavy clashes lasting several days various rebel groups succeeded in taking the Aleppo Infantry Academy. At the Academy, the rebels captured six T-54s¹. The SAA had previously probably used those tanks to train new troops, as such they were able to be used by the rebels immediately.

¹ <https://www.youtube.com/watch?v=M2sJagGjZ6s>



An image where we can see some of the six T-54s captured at Aleppo Infantry Academy in December, 2012.²



Nice image where we can see T-54s captured at Aleppo Infantry Academy on December, 2012 the first one still has the top machine gun support

It must be noted that the capture of the Aleppo Infantry Academy led to one of the largest (if not the largest) rebel capture of ammunition and weapons throughout the war. In the same attack on the Academy the rebels captured one BMP-2.

² <https://www.youtube.com/watch?v=-GppYHIEoFA>

T-54A has been seen in Idlib governorate as well. This tank looks worn out from combat as the tread skirts and the typical metal strip at the front of the hull are missing. Note that since Idlib and Aleppo province are connected and rebels frequently move from one province to another a T-54 captured in Aleppo province could end up in Idlib and vice versa.



A T-54A in March 2015 spotted somewhere in Idlib governorate, Syria. The tank in this image is not one of the T-54As captured in the Aleppo Infantry Academy.

On February 17, 2016 a photograph was taken with the caption, “a fighter with the Syrian Government forces sits atop a tank in the province of Raqqa.” Thanks to images and information provided by Mathieu Morant, we can see that this was an unusual event. This was the first T-54 spotted in Raqqa governorate, though it is most likely that it was sent to the front from Aleppo governorate.

Agathocle de Syracuse³ (a cartographer focusing on Syria) said that the only possible location the tank could be in was territory near the town of Ithriya, the only government held territory in Raqqa province at that time.

³ <https://twitter.com/deSyracuse>



A pro-government T-54B/M being driven in Raqqa province, Syria on 17 February, 2016 (Alexander Kots, AP)



Thanks to Mathieu Morant, this tank was identified (which at first sight does not look like a T-54) as the same tank in the photograph above. Note the infrared searchlight at the left side of the main gun (the main distinction between T-54B/M and earlier variants).



The same T-54B/M in Raqqa governorate (Alexander Kots)

The Oryx Blog published an article⁴ in November 2014 about some ghaneema (Arabic term for war spoils) captured by rebels in the town of Nawa south of Damascus. The ghaneema included two T-54-3 tanks, one of which was a training tank as can be seen in a video.⁵



A T-54-3 captured at Nawa by rebels

⁴ <http://spioenkop.blogspot.com.es/2014/11/nawa-captured-by-free-syrian-army.html>

⁵ https://youtu.be/g2Ff_x1MSZ4?t=1516



Photo of the T-54-3 training tank captured in Nawa, Damascus governorate by rebels

The tank was part of the 112th Brigade from the 5th Mechanized Division⁶, this Brigade is not known for being competent. Other SAA Brigades may still operate the T-54 tank. Also in Qalamoun Jabhat al Nusra between a bigger loot captured one T-54-3 and one T-54A on 2014.⁷



Photo of the T-54s captured by JN in Qalamoun

Finally there was an FSA unit called "*Martyrs of the Harasta Battalion*" it presumably operated in the little suburb/town of Harasta at the north of Damascus. They captured a T-54A on December 2012 as can be seen in a video.⁸ They also claimed the tank was captured from the 22nd Brigade. In documents about the SAA order of battle⁹ there does not appear to be any unit called 22th Brigade, but there is a misnamed armored brigade from the 11th Division, so that brigade could be the 22th. Also on April 2013 the Harasta Battalion uploaded a video about one of their dead vice commanders¹⁰, where he appears in some photos with a T-54A. It is reasonable to think that it is the same tank captured from the 22th Brigade.

⁶ <http://www.understandingwar.org/sites/default/files/SyrianArmy-DocOOB.pdf>

⁷ <http://www.khilafahposs.co.vu/2014/05/488-559.html>

⁸ <https://www.youtube.com/watch?v=ikDntuCQ34Q&list=WL&index=25>

⁹ <http://www.understandingwar.org/sites/default/files/SyrianArmy-DocOOB.pdf>

¹⁰ <https://www.facebook.com/alshhed.mohamd.mahfod/posts/284679158333292>



The first image of the T-54A captured from the 22nd Brigade



Photos of the same T-54A with the vice commander of the Martyrs of Harasta Battalion



Another photo of the same T-54A. Note again the radial old type wheels.



Another photo of the same T-54A with the vice commander of the Martyrs of Harasta Battalion

Also, from the 61th Infantry Brigade, an independent unit acting as a reserve force of the First Army Corps¹¹, two T-54A and one T-54-3 were captured by the rebels in Deraa province on July 2014.¹² It is interesting because the three tanks were in good status, also in one photo one of the tanks still has external fuel drums.



A T-54-3 captured by rebels in Daraa, note again the radial type of wheel

¹¹ <http://www.understandingwar.org/sites/default/files/SyrianArmy-DocOOB.pdf>

¹²

<https://www.youtube.com/watch?v=6s6tG3A5ZM4&list=PLquljmOq7hKkhXhgDUU3dLC1arffLqW8b&index=40>

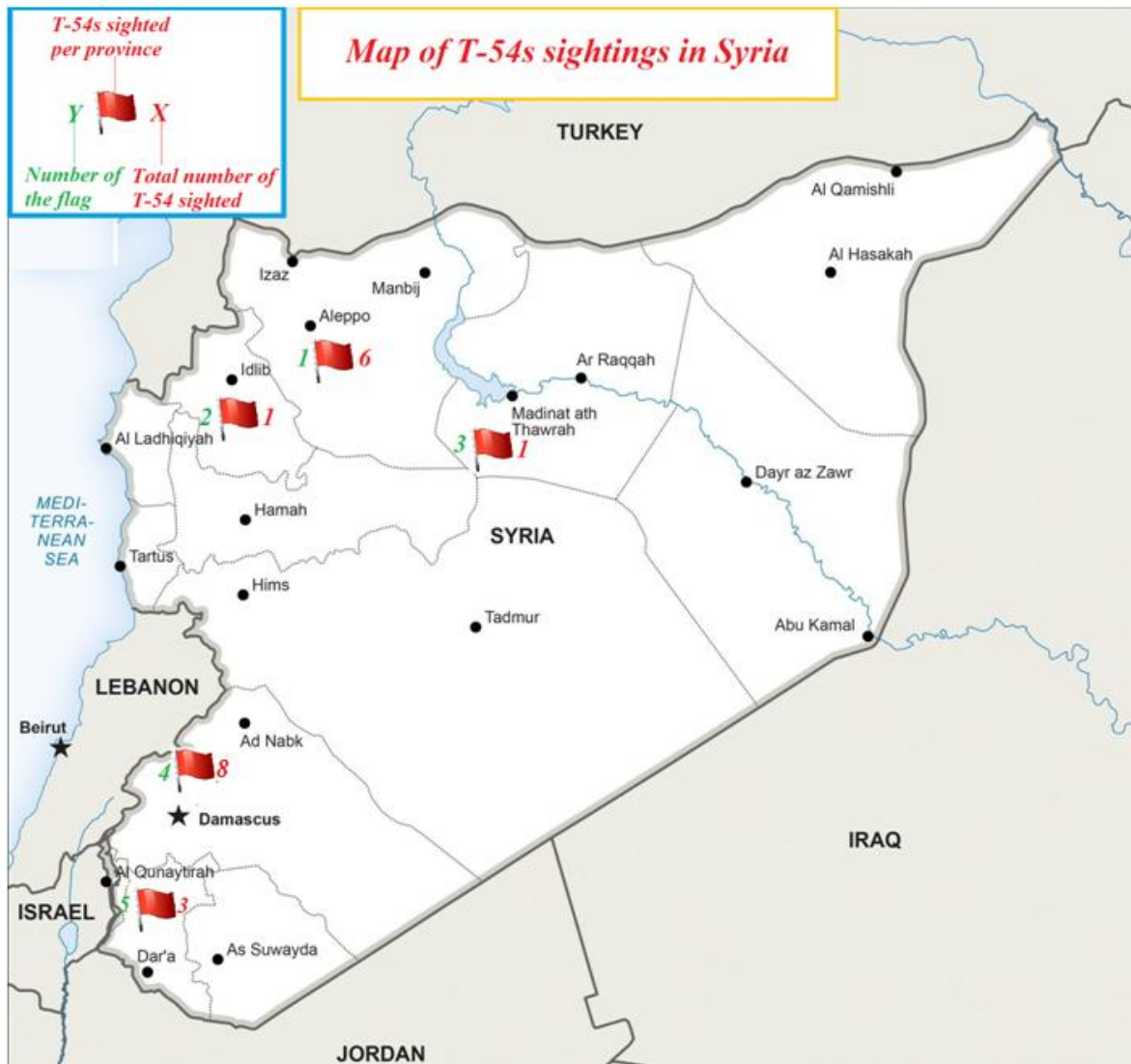


A T-54A captured by rebels in Daraa, note the external fuel drums at the back of the tank

Finally, there are also some rare T-55s where the main gun from a T-54-3 has been installed to replace the original one, like on this T-55A Model 1970 from North Korea.



A T-55A with North Korean rangefinder and T-54-3 main gun in Syria



Flag 1: <https://www.youtube.com/watch?v=M2sJagGjZ6s>

Flag 2: http://www.mediafire.com/view/r32ihculi4gksld/march_2015_idlib_T-54A.png

Flag 3: <http://www.dailymail.co.uk/wires/ap/article-3455808/Syria-denounces-outrageous-Turkish-artillery-shelling.html>

Flag 4:

<https://www.youtube.com/watch?v=6s6tG3A5ZM4&list=PLquljmOq7hKkhXhgDUU3dLC1arrfLqW8b&index=40>

https://www.youtube.com/watch?v=g2Ff_x1MSZ4&feature=youtu.be&t=25m16s

<http://spioenkop.blogspot.com.es/2014/11/nawa-captured-by-free-syrian-army.html>

<http://www.khilafahposs.co.vu/2014/05/488-559.html>

https://www.mediafire.com/folder/zz8uz0h5gsh65/T-54_strange_giant_workshop

Flag 5:

<https://www.youtube.com/watch?v=6s6tG3A5ZM4&list=PLquljmOq7hKkhXhgDUU3dLC1arrfLqW8b&index=40>

Final Analysis

Since the newer T-55s were slightly better than the T-54s and had a greater chance of receiving update packages, the T-54 became attached to secondary units. Furthermore, many T-54s were stored in the reserve to be cannibalized for spare parts. Thus in this situation, when the SAA stored T-54s they should have kept T-54B/Ms at the front of the reserve and ready to be reactivated.

Looking at the T-54B/Ms in reserve, the tanks are usually stored next to others of the same model to ensure easy reactivation of units when in need. Thus, it is not unreasonable to think that there may be some other T-54B/M in pro-government hands in the same area of operations.

The T-54B/M also has some peculiarities, first it was one of the few T-54s used by the Syrian Army and secondly it was the first T-54B/M seen in the conflict. The Conflict Intelligence Team¹³ has stated this could indicate that Assad regime is unable to supply modern armor to its troops and have therefore begun to activate T-54 tanks that until now would be in the reserve. However, it must be taken in to account that it is not 100% clear if this model of tank was in reserve with the SAA, as there are no documents available claiming this. However, all the open-source information available points to this being the case.

The T-72Bs and T-90s supplied by Russia are going to the best pro-government units, including foreign fighters. But what about the regime militia units that actually make up the bulk of its fighters? The various pro-government militias also require armored equipment, but obviously they are not going to receive T-72B or T-90 tanks. Most evidence suggests that they

Among those tanks in reserve, most likely the vast majority would be T-54. Of these T-54s in Reserve, the the T-54B/M variants offers decent capabilities for a war like this. It is also interesting that the T-54s were probably used to train the cadets in tank warfare. For instance in Nawa there was a T-54-3 that was used for training, it is possible there is some kind of SAA "doctrine" setting aside the T-54s for the training, as they are similar to the T-55s and also slightly less valuable. However, the three T-54s captured in Deraa suggest that the T-54 is still operated by some units of the regular army or maybe that those T-54s were reactivated because of the war.

¹³ <https://www.facebook.com/notes/conflict-intelligence-team/%D1%83%D1%81%D0%BF%D0%B5%D1%88%D0%BD%D0%BE-%D0%BB%D0%B8-%D0%BD%D0%B0%D1%81%D1%82%D1%83%D0%BF%D0%BB%D0%B5%D0%BD%D0%B8%D0%B5-%D0%BD%D0%B0-%D1%80%D0%B0%D0%BA%D0%BA%D1%83/601325086687139>

Many would suggest that this is an old and out of date tank unfit for the war in Syria, but the truth is that due to the poor tactics and training this kind of tank still could play a decent role in fire support role as far as it doesn't get exposed to ATGMs, most RPG variants and recoilless rifles.

The significant number of T-54s that have been used along history by the SAA suggests that we are going to continue to see a small number of T-54s throughout the war. It is also possible that we will see increasing numbers as the conflict continues and T-54s begin to be reactivated. T-54s should not represent a logistical problem since they share most of their pieces with T-55s and the basic training program is likely similar to that of the T-55s. Hopefully this article has shown that the T-54, often forgotten in favor of the T-55, still has chapters to be written in the pages of history.

I want to thank to Rao Kumar¹⁴, Oryx¹⁵ and Mathieu Morant¹⁶ for their goodwill and patience in helping me with this article. They are great guys!

Also I have created a little database with all the T-54 photos I have seen in Syria, feel free to have a look or use them. <http://www.mediafire.com/?s43bm2c8byxwf>

¹⁴ <https://twitter.com/RaoKumar747>

¹⁵ <https://twitter.com/oryxspioenkop>

¹⁶ <https://twitter.com/MathieuMorant>