

This is a handbook for identifying the most common and significant weapons used in Syria.

Syria's light infantry rebel forces rely on small arms and crew-served weapons, while the Assad regime has heavily utilized infantry fighting vehicles and main battle tanks. Aircraft, artillery, and air defense artillery highlight some additional capabilities the Assad regime has relied on in the conflict.

Opposition media has a tendency to report all armored vehicles as "tanks." Analysts examining videos posted by the Syrian opposition can use this guide to correctly identify the various armored vehicles used in the Assad regime's operations.

Similarly, many observers have been eager to understand the capabilities of the Syrian rebels, and this guide may offer a better appreciation of the strengths and weaknesses of the armed opposition.

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#### *AK-47 Assault Rifle*



The AK-47 is the most ubiquitous rifle carried by rebels and loyalist troops alike. Other assault rifles such as the G-3 and M-16 appear to a lesser extent. Assault rifles are effective against infantry at close range but are not effective against armored vehicles.

#### *PKM Medium Machine Gun*



The PKM is the machine gun Syrian rebels most commonly use. These belt-fed weapons have a longer range and a faster rate of fire than rifles, which makes them critical for suppressing opponents during raids and ambushes. They are not effective against armored vehicles. Syrian rebel units have some machine guns but not the appropriate amount for a light infantry force.

#### *SVD Sniper Rifle*



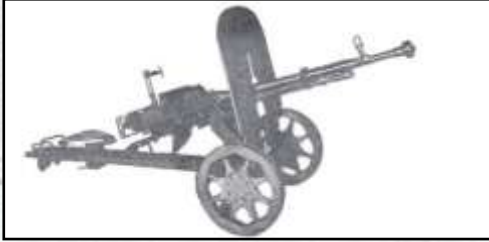
The SVD Dragunov is the most common precision rifle on the battlefield in Syria, and rebel groups have on occasion acquired these rifles. They are useful for precision fire against regime checkpoints but are ineffective against armored vehicles.

#### *RPG-7V Grenade Launcher*



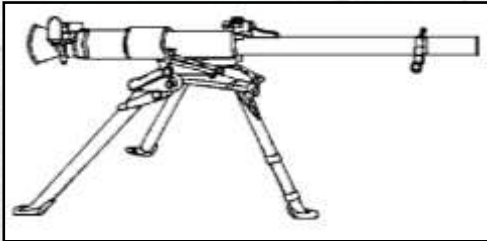
The RPG-7 is the most common anti-armor weapon that Syrian rebel forces carry, but like the PKM machine gun they do not have an appropriate amount of launchers or ammunition for a light infantry force. These weapons are effective against more lightly armored vehicles, such as BMPs, but not against main battle tanks. Some reports suggest the rebels have also utilized the more advanced RPG-29.

#### *DShK Heavy Machine Gun*



The DShK heavy machine gun was originally developed as an anti-aircraft weapon. It is effective against rotary-wing aircraft, but is used more commonly against ground targets. These weapons, both the 12.7mm and 14.5mm models, are mounted on many regime vehicles and have been increasingly mounted on rebel pickup trucks. The larger caliber round makes these weapons effective against light-skinned armored vehicles and deadly when used against infantry forces.

#### *SPG-9 Recoilless Rifle*



These large caliber, single-shot weapons can fire anti-personnel rounds but are primarily used in an anti-tank role. They are man-portable but are typically transported or mounted on vehicles. These weapons are effective against armored vehicles, and Syrian rebels have mounted them on pickup trucks.

#### *AT-7 Anti-Tank Guided Missile*



ATGMs are very effective against tanks and armored vehicles and the AT-7 is the most common anti-tank guided missile in the Syrian arsenal. Rebels began to acquire these weapons in increasing numbers in early 2012 and have used them to great effect against regime armor. The Metis-M missile is a variant of the AT-7. Some reports suggest rebel use of more advanced AT-14 Kornet ATGMs.

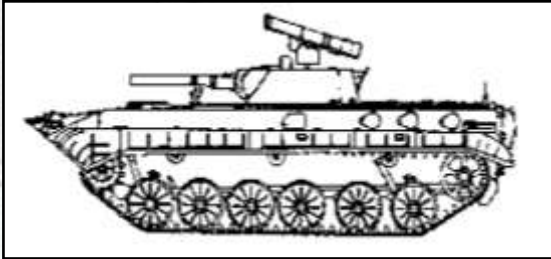
#### *82mm Mortar*



Both the regime and rebel forces use these common and relatively lightweight indirect fire systems in Syria. While they are man-portable, they are usually carried in a vehicle of some kind. They do not bring the same level of firepower as the larger towed artillery systems, but they are still an effective weapon for indirect fire suppression.



*BMP-1*



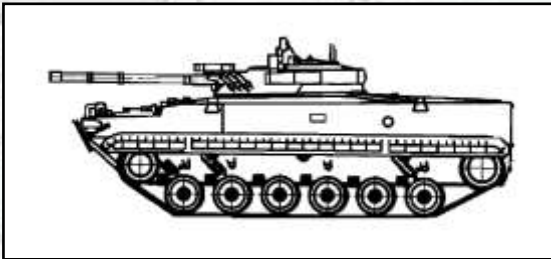
The Assad regime's armored and mechanized infantry divisions include large numbers of BMPs, with well over 2,000 BMP infantry fighting vehicles in their entire arsenal. Often confused in opposition reporting as "tanks," these armored vehicles do not have as much armor as main battle tanks.

*BMP-2*



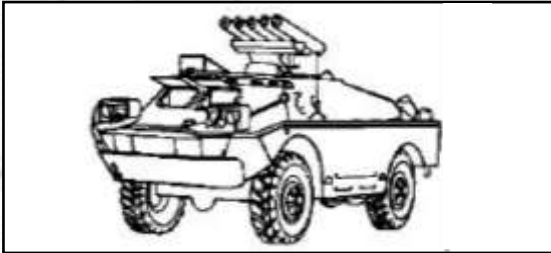
While the vehicles were designed primarily to transport infantry, the regime has used them to control checkpoints and key intersections, as well as to clear opposition strongholds during major operations. Syrian rebels have been relatively effective using RPG-7s and IEDs to disable these vehicles, but the majority of rebels' small arms are ineffective against them.

*BMP-3*



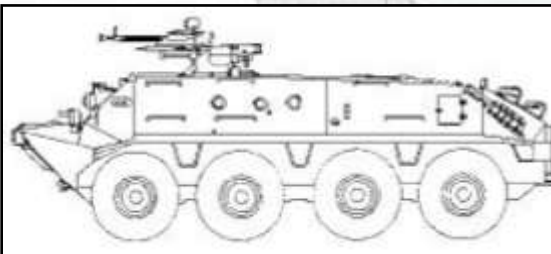
Certain features of these vehicles make them distinguishable from tanks. Like tanks, they are tracked vehicles, but unlike tanks, their main gun and turret is much smaller. BMPs typically have 'skirts' of light armor that cover the top of their tracks and have rear doors for infantry to get in and out of the vehicle.

*BRDM-2*



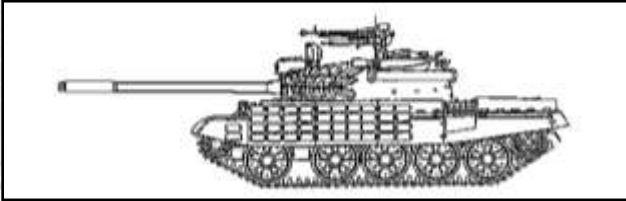
The regime has used BRDM-2 armored scout cars extensively because they require less fuel and maintenance and are more maneuverable in urban environments. They are easily identifiable by their simple two-axle design, and about half of the regime's approximately 1,000 vehicles are outfitted with ATGM launchers on the roof.

*BTR-50, BTR-60, BTR-70*



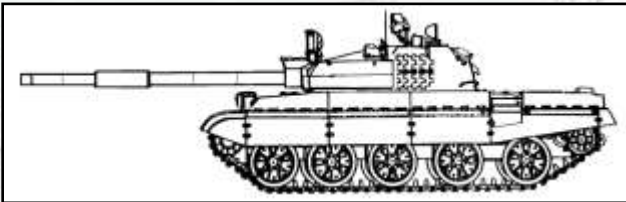
The BTR is another common armored troop carrier, with roughly 1,000 in the Assad regime's inventory. These vehicles have less armor and less firepower than a BMP and are distinguishable by the snub nose and the wheels, as opposed to tracks.

*T-55*

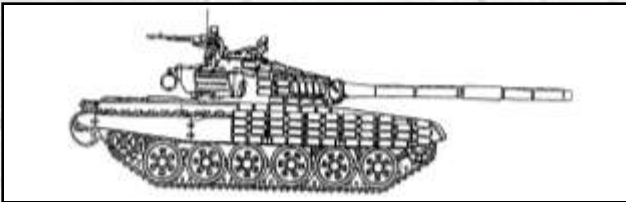


The Assad regime's armored and mechanized infantry divisions include large numbers of main battle tanks, with over 4,500 tanks in the full arsenal. However, a large percentage of older-model tanks are either confined to static fighting positions or permanently disabled due to lack of maintenance. Main battle tanks are primarily designed for tank on tank combat, but they are useful to the regime because their thick armor shrugs off most rebel attacks and their heavy main guns suppress unrest in Syria's towns and neighborhoods.

*T-62*



*T-72*



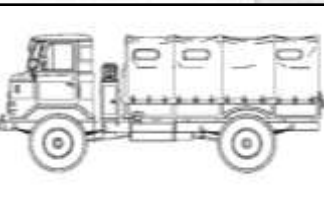
The most advanced tanks in the Syrian arsenal are T-72s, but the older-model T-62s and T-55s have seen service during the current period of unrest. The easiest way to spot a T-55 is the thicker section of the barrel is all the way at the front. T-62s have taller and more rounded turrets than the squat and angular turrets of the T-72s. The rear-facing 12.7mm DShKA machine guns are easy to spot on the T-72s.

*KrAZ & Actros Heavy Equipment Transporters*



HETs are critical logistical vehicles for the Assad regime because they allow them to transport main battle tanks and BMPs around Syria. The regime tends to use its older Russian KrAZ tractors to move BMPs and prefers the newer Mercedes Actros trailers to pull main battle tanks.

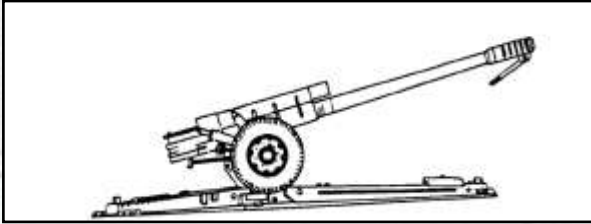
*GAZ-66 & ZIL-157 General Utility Trucks*



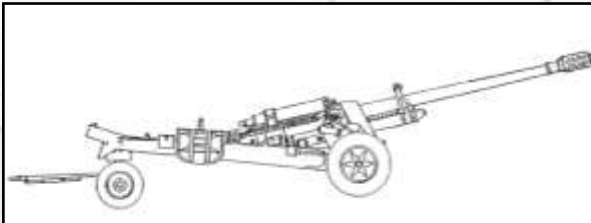
The Syrian Army uses Russian GAZ and ZIL trucks as general utility equipment and troop carriers. The regime has also relied heavily on civilian style buses to move *shabiha* and infantry to various centers of unrest throughout the country.



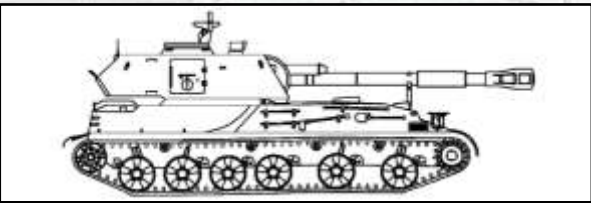
*D-60 122mm Howitzer*



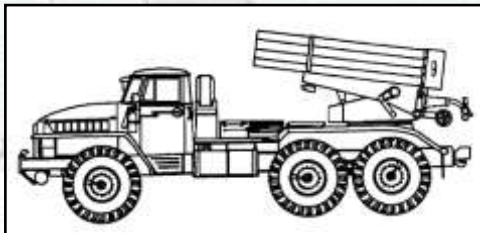
*M-46 130mm Howitzer*



*2S3 Self-Propelled Artillery*



*BM-21 122mm Rocket Launcher*



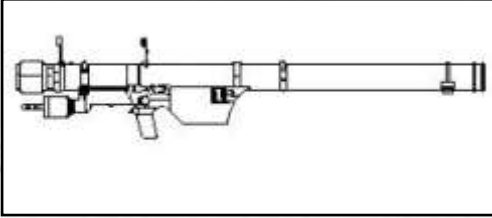
The Assad regime began to use towed artillery against centers of unrest in January and February 2012, primarily in Zabadani, near Damascus, and in central Homs.

While artillery is not particularly effective against insurgent forces, the regime has heavily shelled rebel-held areas in order to suppress and reduce rebel concentrations ahead of ground-force offensives, or when enough ground forces are not available. In this way, artillery is an economy of force measure for the Assad regime to suppress dissent when it lacks the maneuver forces to rout rebels.

The most common artillery pieces in the Assad regime's arsenal are the D-30 and M-46 Howitzers; however, the security forces have utilized S21 and 2S3 self-propelled artillery pieces in a similar manner. These tracked, armored vehicles that could be confused with tanks are actually indirect fire weapons.

In addition to conventional artillery, the Assad regime has employed Katyusha-type multiple rocket launchers (MRL) such as the vehicle mounted 122mm BM-21 and the towed 107mm Type-63 system. These rockets are area weapon systems and often less accurate than artillery.

#### SA-7 GRAIL MANPAD



The SA-7 is the one of the most common man-portable air defense (MANPAD) rockets in the Syrian inventory. Others include the SA-14 GREMLIN and SA-18 GROUSE. As of May 2012, there have been no verified instances of Syrian rebels using MANPADs against regime aircraft. These weapons represent a significant proliferation risk in Syria.

#### ZSU-23 23mm Towed ADA



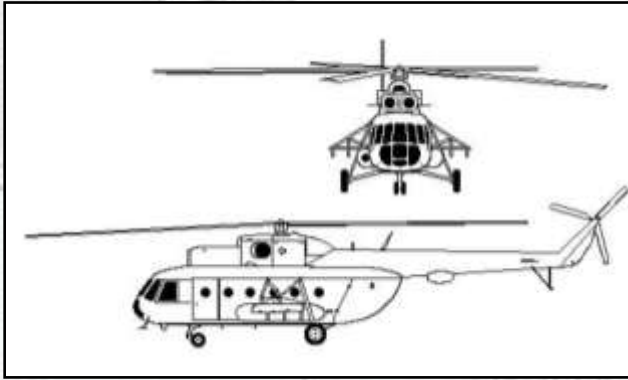
The 23mm towed ZSU-23 air defense artillery piece is a common dual barrel anti-aircraft gun that the Syrian regime has also used against ground targets. ZSU-23s have been used for base defense, and videos that surfaced in early 2012 showed *shabiha* paramilitaries using ZSU-23s mounted on pickup trucks.

#### ZSU-23-4 Self-Propelled ADA



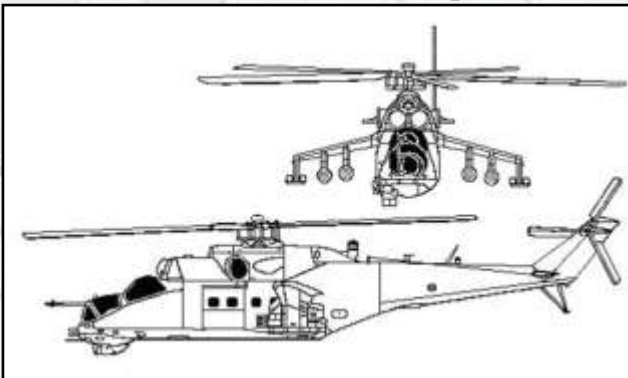
The self-propelled version of the ZSU-23 uses the same basic round but has four barrels and is mounted on a tracked vehicle, often with integrated radar, and designed for mobile air defense. Syrians usually use the name “shilka” to describe these vehicles, which have been frequently used against ground targets throughout Syria.

#### *Mi-8 HIP Utility Helicopter*



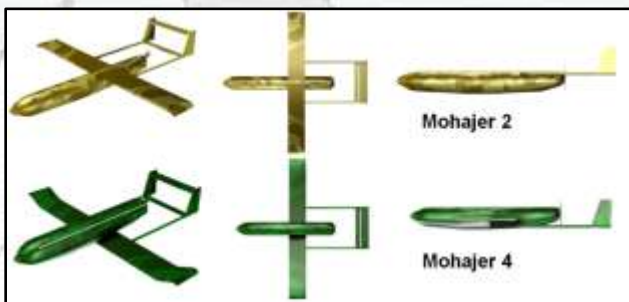
The Russian Mi-8 HIP helicopter is a general utility helicopter designed primarily for troop transport. Mi-8s are often equipped with unguided rocket pods, which the Syrian military has used to attack rebels in Idlib and northern Aleppo provinces. The Assad regime has approximately 100 of these types of rotary-wing aircraft, including both the Mi-8 and the similar Mi-17 models. The easiest way to distinguish these aircraft is the circular “clamshell” door under the tail boom.

#### *Mi-25 HIND D Attack Helicopter*



The Russian-made HIND attack aircraft is designed to attack ground targets and is therefore a far more lethal rotary-wing platform than the Mi-8 or Mi-17. The Assad regime has approximately 35 HIND helicopters, but rotary-wing aircraft are very difficult to maintain, and it is unlikely that the regime can keep more than 20 in the air. They are distinguishable from the HIP because of their sloping tail boom and stub wings carrying armaments. There have been reports of the Assad regime using HINDs against rebels, but they have not been confirmed.

#### *Mohajer Unmanned Aerial Vehicle*



In February 2012, during the Assad regime’s offensive in central Homs, opposition sources posted YouTube footage of the Mohajer 4 drone flying over the city. The Mohajer is an Iranian unmanned aerial vehicle that has been transferred to the Assad regime in recent years. The aircraft is only capable of reconnaissance and carries no armaments.