Introduction

The following report is based on investigations conducted by the international volunteer community InformNapalm between October 2014 and August 2016 and published on its website. It is a result of 40 special investigations that identified 33 types of Russian military equipment, which were in the possession of anti-government forces in the conflict zone in the Donbas region. [1] [2]

Most of the equipment specified in this report are relatively new models that entered service in the Russian Armed Forces from 2004 through 2015. These types of military equipment are not produced in Ukraine, most of them have never been imported into Ukraine, and, therefore, militants could not have captured them from the Ukrainian government forces.

Operation and maintenance of these modern Russian weapons require well-trained crews, that is, professional Russian Army personnel.

These facts can serve as a strong evidence that Russia regularly supplies anti-government forces in the Donbas with modern military equipment and military personnel to operate it.

Methodology

The identification of military equipment used by anti-government forces in the Donbas was performed using open sources, such as:

- Photos from personal accounts in social networks
- TV footage from the occupied territory
- Videos recorded by local witnesses and posted on YouTube
- Satellite images of the occupied territories
- Other sources

A typical investigation relied on multiple sources for the discovery and identification of particular models of military equipment. In many cases, we were even able to identify the Russian military unit that operated the discovered piece of equipment.

An abundance of personal photographs of Russian servicemen and local anti-government militants in the social networks Odnoklassniki, Vkontakte, and Facebook helped our investigators. Location identification was performed by geolocation tags on the photos, as well as by characteristic features of landscape and architecture.

While Ukrainian media faces severe restrictions to its ability to work in the occupied territories, a large amount of material for the analysis is unwittingly supplied by pro-Russian propaganda media that can work there freely and represents the position of the anti-government forces.

The results of the investigations have been repeatedly reaffirmed with the discoveries of new evidence. In particular, they were confirmed by other journalists, Ukrainian government officials, and international investigators.
List of reported equipment

**GAZ-233014 Tigr**, infantry mobility vehicle


The Tigr has level 3 ballistic protection according to the Russian GOST R 50963-96 technical standard. The roof of the vehicle has a large rotating pop-up hatch with brackets for weapons. [3]

**GAZ-3937 Vodnik**, infantry mobility vehicle


It is featured in a video from Sorokyne (formerly Krasnodon, Luhansk Oblast) made on January 10, 2015. [4]

**KAMAZ-43269 Vystrel**, infantry mobility vehicle

This Russian light-armored IMV is equipped with an armed rotating turret. It can be fitted out with a 14.5mm KPVT machine gun, 12.7mm Kord machine gun, 30mm Plamya grenade launcher, or an anti-tank missile system. Identified in Luhansk and Luhansk Oblast in numerous InformNapalm investigations. More than 10 vehicles of this type were recorded in the Donbas.

Testing of this vehicle was conducted at the 7th military base in Gudauta. Since 2009, vehicles of this type were recorded in Georgia at Russian occupation military bases in Abkhazia and Samachablo (Tskhinvali region). In particular, the 4th Russian occupation base in Tskhinvali (military unit 66431) previously possessed 4 vehicles with side numbers 300, 301, 302, and 303 and identical camouflage, matching a vehicle number 300 observed in Luhansk. This IMV is also used by regional special units of the Federal Penitentiary Service of the Russian Federation. [5] [6] [7]

**BTR-82A**, armored personnel carrier

This Russian armored personnel carrier (APC) is a deep modernization of the BTR-80. The newly installed armament includes an integrated turret system armed with a 30 mm automatic cannon 2A42 aligned with a 7.62 mm PKTM machine gun. Approved for service by the Russian Ministry of Defense in 2005. Never supplied to Ukraine. Identified in Luhansk Oblast in numerous InformNapalm investigations. In service with a unit of the 18th Motorized Rifle Brigade of the Russian Armed Forces. [8] [9]
**T-72B, main battle tank, 1989 model**

A modernized version of the T-72 equipped with new armament and fire control systems, Kontakt-5 explosive reactive armor (ERA), 9K120 Svir laser-guided antitank missile system (ATGM), V-84 engine, 1A40 fire control system, and 2A46M smoothbore gun.

Never supplied to Ukraine. It was identified in Luhansk, Debaltseve and Makivka in numerous InformNapalm investigations. The 5th Armored Brigade of the Eastern Military District of Russia was identified as its operator. [10] [11]

**T-72BA, main battle tank, 1999 model**

A later model of the T-72B, with upgrades installed at the Uralvagonzavod plant during refurbishment. The first examples of this type were delivered in 1999-2000. The upgrades included the replacement of 1A40-1 fire control system with 1A40-1M, and later (starting in 2005) 1A40-M2, installation of a new 2E42-4 Jasmine gun stabilizer, enhanced anti-landmine bottom protection with an additional armor plate under the driver seat, replacement of the chassis and the engine (initially, with V-84MS engine, as of 2003 - with V-92S2), and installation of Kontakt-5 ERA. The modified version is set apart from the regular B model by new track chains, ERA and a distinctive wind sensor on the turret.

This type was never supplied to Ukraine. The destruction of Russian tanks of this type was recorded near Starobesheve (Donetsk Oblast). Their operator was identified as the 21st Motorized Rifle Brigade of the Russian Army. [12]

**T-72B3, main battle tank, 2011 model**

The upgraded version of the T-72. Supplied to the Russian Army since 2012. The tank is fitted with the latest fire control system, Kontakt-5 ERA, Sosna-U thermal imaging scope, a wind sensor, enhanced communication equipment, an advanced gun stabilizer and a protection kit from weapons of mass destruction. It also received improved automatic gun loader for new munitions and enhanced chassis with parallel hinge track chains.

This type was never supplied to Ukraine. It was identified in Luhansk, Ilovaisk and Debaltseve in numerous InformNapalm investigations. The destruction of Russian tanks of this type was recorded near Debaltseve. Operated by the 6th Armored Brigade of the Russian Armed Forces. [13] [14]

**T-90A, main battle tank, 2006 model**

Modification of the T-90. It is fitted with an up-to-date second-generation ESSA thermal imaging scope, stabilized in two planes and integrated with the main scope and its range-finding channel, enhancing the night vision range from 1800 to 4000 m. Never supplied to Ukraine. Identified by InformNapalm in Luhansk Oblast. In service with the 136th Motorized Rifle Brigade of the Russian Armed Forces. [15]
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**T-72S1**, main battle tank

The export version of the T-72B1 supplied by Russia to Iran and Venezuela in 2011-2012. The main external difference from the T-72B is the TPN-3-49 night sight and the DVE-BS wind sensor. It was introduced into the Russian army in 1993, following cancellations of a number of export sales. Never supplied to Ukraine. Identified by InformNapalm at a factory in the village of Bile (Luhansk Oblast) nearby the M04 motorway, 3 km west of Zbirna railway station. [16]

**KamAZ-5350 Mustang**, military truck

Russian military 6x6 truck. Never supplied to Ukraine. Spotted in Luhansk and Donetsk Oblasts. The destruction of a vehicle of this type with an additional protection kit and the MM-501 multi-functional module for personnel transport was recorded in Khrustalnyi (formerly Krasnyi Luch, Luhansk Oblast). [17]

**Ural-632301**, military truck

Russian multi-purpose 8x8 truck with cargo capacity of up to 14 tons. Approved for service by the Ministry of Defense of the Russian Federation in 2004. Never supplied to Ukraine. Identified in Donetsk Oblast in multiple InformNapalm investigations. [18]

**Ural-43206**, military truck


**2B26 Grad-K**, multiple launch rocket system

Modernized version of the BM-21 Grad multiple launch rocket system (MLRS) mounted on KamAZ-5350 chassis. Soviet era Grad systems, including all those in service in Ukraine, use the dated Ural-375D chassis. Entered service with the Russian army in 2011. Never supplied to Ukraine. Identified in Chystiakove (formerly Torez, Donetsk Oblast) in multiple InformNapalm investigations. [20] [21]
9K58 Smerch, multiple launch rocket system

This 300mm MLRS is in service with both the Russian Army and the Ukrainian Army. However, there are no registered facts of the militants capturing this system as a trophy. On January 22, 2015, a Smerch launcher was spotted in the occupied city of Makivka (Donetsk Oblast). On February 10, 2015, pro-Russian militants launched a rocket attack on the military airfield and residential areas of Kramatorsk, causing casualties among both Ukrainian soldiers and civilians. [22]

1RL232-2M Leopard, battlefield surveillance radar

This sophisticated ground-based battlefield surveillance radar station is capable of detecting ground and marine surface targets as well as artillery shell bursts. Its radio-electronic equipment enables the station to monitor the operational environment in range from 200 m to 40 km. Unveiled at the Oboronexpo 2014 exhibition. Never supplied to Ukraine. Identified in Debaltseve, Donetsk Oblast in multiple InformNapalm investigations. [23]

9K330 Tor, 9K331 Tor M-1, and 9K332 Tor M-2, tactical surface-to-air missile systems

This is an all-weather low to medium altitude, short-range surface-to-air missile (SAM) system designed for engaging airplanes, helicopters, cruise missiles, precision guided munitions, UAV’s and short-range ballistic threats. 9K330 Tor was phased out from service with the Ukrainian Army in 2001. There is no evidence of capture of this type of SAM by militants. 9K330 SAM was identified in Donetsk, and its latest Russian modification 9K332 was recorded in Shahtarsk, Donetsk Oblast on January 20, 2015. [24] [25]

96K6 Pantsir-S1, surface-to-air missile and gun system

Russian self-propelled land-based surface-to-air missile and gun system (SAGM). Designed to provide point air defense of military, industrial and administrative installations against aircraft, helicopters, precision munitions, cruise missiles and UAV’s, as well as to provide additional protection to air defense units from air and surface threats. Approved for service by the Russian Ministry of Defense on November 16, 2012. Never supplied to Ukraine. Identified in Luhansk and Shakhtarsk, Donetsk Oblast in InformNapalm investigations. [26]

R-166-0,5 radio station

Mobile military medium-power HF/VHF radio station based on K1Sh1 wheel chassis. Approved for service by the Russian Ministry of Defense in 2005. Never supplied to Ukraine. Identified in Debaltseve, Donetsk Oblast in multiple InformNapalm investigations. [27] [28]
R-441-OV Liven, radio station

Mobile satellite communications station. Designed to provide countermeasures-safe satellite communication for military units and installations of operational and operational-strategic command levels. Approved for service by the Russian Ministry of Defense in 2007. Never supplied to Ukraine. Identified in Luhansk in InformNapalm investigations. [29]

Kushetka-B R-149BMR, command vehicle

Russian command and staff vehicle of the operational and tactical level based on the K1Sh1 chassis. It is designed for monitoring of the combat zone operational environment. It is fitted with HF and VHF radios and navigation equipment. Never supplied to Ukraine. Spotted in Luhansk Oblast. [30]

RB-341V Leer-3, EW system

Russian GSM jamming system equipped with a drone functioning as the remote jamming antenna. It includes a control truck on the KAMAZ-5350 chassis and an Orlan-10 drone. It can perform jamming of mobile communications, simulation of GSM 900 and GSM 1800 base stations and transmission of simulated signals and messages, signals intelligence by detecting emission points of GSM phones, detection of users’ coordinates (mobile phones, tablets and other communication devices), target indication to artillery units. Unveiled in early October 2015. Never supplied to Ukraine. Identified in Donetsk by InformNapalm. [31]

R-378B Borisoglebsk-2, EW system

Russian automated jamming station mounted on the MT-LB chassis. The system is designed to jam mobile satellite communication and navigation systems within integrated tactical command and control systems. Never supplied to Ukraine. Identified in Kadiivka (formerly Stakhanov, Luhansk Oblast) and Luhansk. [32] [33]

R-934UM, EW system

Russian radio jamming station. It provides automated detection, direction finding and signals intelligence of radio sources in the frequency range between 100 and 2000 MHz; it also jams VHF radiotelephone and mobile trunked radio systems. Never supplied to Ukraine. Identified in Luhansk in InformNapalm investigations. [34]
R-330Zh Zhitel, EW system

Russian radio jamming station. It provides automated detection, direction finding and signal intelligence of radio emitting sources in the frequency range between 100 and 2000 MHz; it also jams portable and mobile ground stations (user terminals) of INMARSAT and IRIDIUM satellite communication systems, navigation equipment of NAVSTAR (GPS) satellite radio navigation system users and base stations of GSM-900/1800 cellular communication systems. Never supplied to Ukraine. Identified in Makiivka and Horlivka, Donetsk Oblast in multiple InformNapalm investigations. [35]

Torn, EW system

Russian radio jamming station. Specifications are not known. Currently in testing with the Russian Army. Never supplied to Ukraine. Identified in Donetsk in an InformNapalm investigation. [36] [37]

Rtut-BM, EW system

Russian radio proximity fuse jamming station. Designed for the protection of personnel and military equipment from various types of shells and missiles equipped with proximity fuses. In addition, the system can be used to jam communication and radar systems. Released in 2011, first entered service with the Russian Army in 2013. Never supplied to Ukraine. Identified in Donetsk in InformNapalm investigations. [38] [39]

RB-636AM2 Svet-KU, EW system

Designed for monitoring of the airwaves and tracking various radio emitting sources. The system is able to monitor the radio environment and to protect the data transmitted over wireless channels against interception. The equipment is capable of tracking signals of different electronic systems, perform their analysis and locate the source of these signals. Svet-KU is capable of receiving signals in the frequency range from 25 MHz to 18 GHz. An early version of the RB-636AM2 is mounted on KamAZ-4350 two-axle chassis. There is a new version of the system, presented at specialized exhibitions in 2015, mounted on a Ford Transit chassis. Entered service with the Russian Army in 2012. Never supplied to Ukraine. Identified in Luhansk in an InformNapalm investigation. [40]

Granat-1, UAV

Russian unmanned aerial vehicle, part of a remote monitoring and relay system, capable of air surveillance with photo, video and thermal imaging equipment within an operating range of 15 km. The development of the system was completed in 2010. Never supplied to Ukraine. Identified in Debaltseve in an InformNapalm investigation. [41]
Granat-2, UAV

Russian unmanned aerial vehicle, part of the of a remote monitoring and relay system, capable of air surveillance with photo, video and thermal imaging equipment within an operating range of 15 km. The development of the system was completed in 2010. Never supplied to Ukraine. Identified in Debaltseve in an InformNapalm investigation. [42] [43]

Forpost, UAV

Russian unmanned aerial vehicle. A licensed copy of the Israeli Searcher 2 drone. Manufactured at the Ural Works of Civil Aviation since 2012. Its maximum operating range is 250 km. Never supplied to Ukraine.

On May 20, 2015 the UAV of this type with the tail number 923 was shot down by Ukrainian forces in Donetsk Oblast. According to the InformNapalm investigation, as of 2015 the Forpost UAV was in service with only five units of the Russian Armed Forces (a total of 10 UAV's, 2 aircraft per military unit). [44]

Orlan-10, UAV

Russian unmanned aerial vehicle. Its maximum operating range is 120 km. The system has been in operation since 2010. Never supplied to Ukraine. Identified in Zelenopillia, Luhansk Oblast and Armvrosiivka, Donetsk Oblast. [45]

Eleron-3SV, UAV

Russian unmanned aerial vehicle. Its maximum operating range is 25 km. Never supplied to Ukraine. Identified in Olenivka village, Donetsk Oblast in an InformNapalm investigation. [46]

Zastava, UAV

Russian unmanned aerial vehicle. A licensed copy of the Israeli UAV manufactured by IAI. Manufactured at the Ural Works of Civil Aviation since 2010. Its maximum operating range is 10 km. It is in service with the Russian Armed Forces. Never supplied to Ukraine. It was shot down by Ukrainian border guards near Harasymivka village, Luhansk Oblast. [47]
Conclusions

This report is based exclusively on the results of investigations by the international volunteer community InformNapalm. This list does not cover the weapons and equipment reported by witnesses, media, and Ukrainian officials, where photo or video evidence were not made available.

The presented list is accurate, but it is not complete. It is likely that InformNapalm investigators are not yet aware of many types of the newest Russian military equipment currently operated in the Donbas. Our results also don’t include any estimates on the quantities of each identified type.

The use of the newest Russian military equipment in the Donbas is not widespread. It is likely to be of experimental or testing nature. Most of the equipment we identified is used for signals intelligence, electronic warfare in general, and unmanned aerial reconnaissance, which are currently the areas of the most active military research and development not only in Russia, but also in most advanced countries around the world.

Along with the tests of the newest equipment, Russian military and political leadership has made the decision to flood the occupied areas of Ukraine with the old Soviet style weaponry, including:

- T-64 main battle tank
- Early types of T-72B MBT
- BM-21 Grad MLRS
- Gvozdika 122mm self-propelled howitzer
- Strela-10 (NATO SA-13 “Gopher”) surface-to-air missile system
- BMP-1 and BMP-2 infantry fighting vehicles
- MT-LB multi-purpose armored tracked vehicle
- D-30 122mm howitzer
- Msta-B 152mm howitzer
- MT-12 Rapira 100mm anti-tank gun

These and other types of weapons used by the anti-government forces in the Donbas have also been repeatedly featured in InformNapalm investigations. However, proving direct deliveries of these weapons from Russia to the militants requires different methods and therefore is outside the scope of this report.

About InformNapalm

InformNapalm is an international volunteer community that emerged in March 2014 as a response to Russian military aggression in Ukraine. After the annexation of Crimea people from different walks of life joined forces to counter Russian ambiguous warfare tactics with thorough investigations that present hard evidence of the Russian military intervention. Over time InformNapalm has grown into a diverse team of journalists, open-source investigators, analysts, military experts, translators, and IT engineers from Ukraine, Georgia, the U.S., the EU, Syria, South Africa and other countries.

InformNapalm community believes that lasting peace can be achieved only if all countries respect international law and fundamental rights. We firmly stand against terrorism, intimidation, and military blackmail, all used by the Kremlin to ruin the system of global security and shift the balance of power. Our task is to bring these facts into the spotlight and hold Russia accountable.

The community runs a website – www.informnapalm.org, dedicated to raising the awareness of Russian military presence and war crimes in Ukraine. Recently InformNapalm decided to expand its interest to Caucasus, the Middle East, Central and Eastern Europe, and post-Soviet states that have or can become targets of Russian expansionism. InformNapalm.org publishes investigations and articles in more than 10 languages.
Other investigations by InformNapalm

Other investigations by the international volunteer community InformNapalm include:

Many soldiers and officers of the Russian Armed Forces serve in the combat units of anti-government forces in the Donbas. They are deployed to Ukraine by the orders of their senior commanders and serve there disguised as local militants. InformNapalm has compiled a database of incidents when active duty Russian servicemen were spotted in Ukraine. Currently it contains more than 150 investigations, revealing the participation of personnel from 75 Russian military units in the war in the Donbas. For more details see Professional Russian Army in Ukraine. Database and Visualisation [48] and Russian Military Intervention in Ukraine. [49]

Trying to distract the world's attention from its criminal actions in Crimea and the Donbas, the Kremlin positions itself as the leading actor in the fight against international terrorism. The Russian government has chosen Syria, where a US-led coalition has been fighting Islamic State, to demonstrate its supposed leadership in establishing peace in the region. However, the Russian Air Force has inflicted more casualties to civilian population than to the terrorists. The InformNapalm team cautions Russian pilots against following criminal orders, be it in Syria, Georgia, or Ukraine: killer pilots should not expect to remain anonymous. For more details see Who is Bombing Syria: Personal Data of 58 Russian Officers (Infographics). [50]
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