

Tank Development 2022



Ukraine: T-84 Oplot

Type Main battle tank, Place of origin Ukraine

Service history: In service 1999–present

Present Development Worldwide



A Robotic Combat Vehicle-Medium fires a round at a target during the vehicle's live fire testing at Fort Dix, N.J., June 30, 2021. (US Army) Excerpts from Breaking Defense Web Magazine By SYDNEY J. FREEDBERG JR. on April 18, 2022 at 10:15 AM

Video after video shows Russian armored vehicles burning in Ukraine, which has raised the question of whether armored vehicles are simply a tool of the past.

If the US Army has its way, instead of manned vehicles blundering into ambushes, the first machines into the danger zone could be robotic scouts. Vehicle-mounted active protection systems would intercept anti-tank missiles before they hit, while specialized air defense vehicles would use guns, missiles, and even lasers to shoot down drones. All three technologies are works in progress, but based on the lessons so far from Russia's invasion, these three investments should set America up well against the near-term threats their fleets of armored vehicles may face.

The most revolutionary — but also, speaking realistically, the furthest away — of these developments is the Robotic Combat Vehicle program, a family of relatively expendable reconnaissance machines: Qinetiq's seven-ton RCV-Light and Textron's 10-ton RCV-Medium. (A prospective RCV-Heavy would be 30 tons).

RCV is still experimental, and the Army's putting the Qinetiq and Textron proto-prototypes through years of field trials with no commitment to buy either in quantity. There are plenty of technical problems to work out, especially the balance between artificial intelligence and remote control: Offroad terrain is a much more confusing and cluttered environment than the empty air, so ground-vehicle autonomy lags behind aerial drones, and the current RCVs require constant direction from human operators. That's labor-intensive — two humans per robot, currently — and vulnerable, since adversaries could potentially jam the control link. The Army hopes to make the robots more autonomous and ultimately allow one human to supervise multiple RCVs.



M5 RV

Textron Systems and the Horstman Group are collaborating in order to enhance Textron's M5 Robotic Vehicle – Medium (RV-M) with the Horstman Group's HydroCore suspension. This new partnership was announced at Eurosatory 2022 in Paris.



TheMIS Combat with PROTECTOR RWS

The PROTECTOR remote weapon station from KONGSBERG was integrated in 2017 and is a valuable addition to the TheMIS RWS family. There are several versions of the PROTECTOR RWS available, one of which is equipped with the Javelin missile system.

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TheMIS Combat with deFNder® Medium

As the name suggests this unit is equipped with the deFNder® Medium remote weapon station developed by FN Herstal. In partnership with FN Herstal and the Estonian Defence Forces this armed UGV has been deployed at the biggest Estonian defence exercise Spring Storm 2017. In December 2017 live firing tests were conducted in Estonia where the weapon system was tested with a moving UGV as well as a stationary vehicle.



On 30 July 2013, Russia revealed that it had developed and tested a hybrid-powered silent armored personnel carrier that could be turned into an unmanned ground vehicle. Called the Krymsk,



A new Israeli unmanned ground vehicle pictured during transit



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The Black Knight is a prototype unmanned ground combat vehicle (UGCV) designed by BAE Systems. It is an early prototype that demonstrates advanced robotic technologies. Tested by the US Army, the Black Knight is apt for missions that are too risky for a manned vehicle, including forward scouting, intelligence gathering, and investigating hazardous areas. The Black Knight is equipped with a 25-millimeter cannon and coaxial 7.62-millimeter machine gun, derived from the Bradley.



Phantom-2. Photo by Denis Fedutinov, bmpd.livejournal.com

A growing number of countries have expressed its interest in the improved 8×8 Phantom-2 unmanned ground vehicle.

The improved 8×8 Phantom-2 unmanned ground vehicle (UGV) with a light version based on the 6×6 wheeled platform was displayed during the Unmanned System Exhibition (UMEX) held in Abu Dhabi from 25–27 February. The UGV was developed by experts of Ukraine's state-owned defence holding, UkrOboronProm.



FNSS SHADOW RIDER Modular Autonomous Unmanned Ground Vehicle

FNSS Unveils Its SHADOW RIDER Modular Autonomous Unmanned Ground Vehicle at IDEF 2021

September 2, 2021

by Admin

FNSS continues to develop Shadow Rider unmanned ground vehicle (UGV) concept, which was exhibited at IDEF 2019. The Shadow Rider FoV is equipped with the autonomy kit developed by FNSS. The newest member of the Shadow Rider family is showcased with 25mm unmanned remote turret and its autonomous capabilities at IDEF 2021. Shadow Rider Combat UGV prototype is developed by FNSS engineering with the consideration of the current technologies in the field of robotics and autonomous systems to meet the complex and challenging operational requirements of the modern battlefield.

UGVs of various sizes and capacities are already delivered to the field as experiments and prototypes.



The use of UGVs will increase with the rapid development of the technology and the benefits it will create in the future, according to Ismail Demir, head of the Presidency of Defense Industries (SSB). (AA Archive)

The Turkish defence industry is set to start the mass production of lightweight, medium and heavy-class unmanned ground vehicles (UGVs) in the near future.

The announcement was made during a ceremony on UGVs and military robotic technology, which took place at local defence company FNSS's facility in Ankara on Tuesday.



MILREM

- The Type X drone is a new robotic combat vehicle (RCV) equipped with either an 25 or 30-millimeter auto cannon or anti-tank missiles.
- Inexpensive and semi-expendable, RCVs hold the key to the future of land warfare.
- In the future, Army ground forces will consist of human/RCV vehicles and even some unmanned RCV formations.

A new unmanned ground combat vehicle represents the best look yet at the future of unmanned warfare. The Type X robotic combat vehicle (RCV) is a heavily armed, unmanned mini-tank that could act both independently and alongside manned vehicles. Cheap and easy to operate, unmanned combat vehicles like Type X are likely the future of armored warfare as manned vehicles grow increasingly expensive.

Milrem, an Estonian robotics company, introduced the Type X combat vehicle earlier this month. The Type X builds upon Milrem's experience with robotic combat vehicles, including the THeMIS multipurpose vehicle. Unlike THeMIS, which is more of a robotic mule, Type X resembles a scaled down main battle tank. Here's THeMIS in action, firing a .50-caliber machine gun in support of dismounted infantry.



Russian Armed Forces to Receive 20 Uran-9 Unmanned Combat Ground Vehicle

Russian Armed Forces to Receive 20 Uran-9 Unmanned Combat Ground Vehicle

April 11, 2021

by Admin

A new batch of 20 Uran-9 unmanned combat ground vehicle (UCGV) will soon be transferred to OJSC 766 Department of Production and Technological Completion (currently by Kalashnikov Concern) to the Armed Forces of the Russian Federation. This was reported to the Minister of Defence of the Russian Federation, General of the Army Sergei Shoigu, during a visit to an enterprise where robotic systems for various purposes are being developed and produced. Uran-9 was also used in the large-scale Vostok 2018 drills.



Russian Unmanned Vehicles



The ZSD-63 is one of China's first AFVs, having entered into service in the 1960s, with multiple hospital, recon, mortar, troop transport and antitank variants. This ZSD-63 have been modified to drive autonomously, as indicated by the three front mounted sensors, which include video cameras, and presumably LIDAR and radar for navigation. *AssassinsMace via WWW.FJYS.CN*

India's state-run Defence Research and Development Organisation (DRDO) is planning to develop a new combat unmanned ground vehicle (UGV) based on India's Arjun Mk 1A main battle tank (MBT).



The DRDO's *Technology Focus* bulletin for April said a plan to “design, develop, and validate” the new tracked combat UGV has been proposed by its Chennai-based Combat Vehicles Research and Development Establishment (CVRDE)