

Tactical Vehicle of Fire Support



<https://sis.nipo.gov.ua/en/search/detail/842254/>



Patent URL



HISTORY OF CREATION

Based on the analysis of ATO obtained during combat experience to ensure a symmetrical response to aforementioned threats and to obtain a decisive advantage over the aggressors in the bar of the tactical confrontation, Ukraine faced an urgent need of adoption something new as a Tactical Vehicle of Fire Support (TVFS).



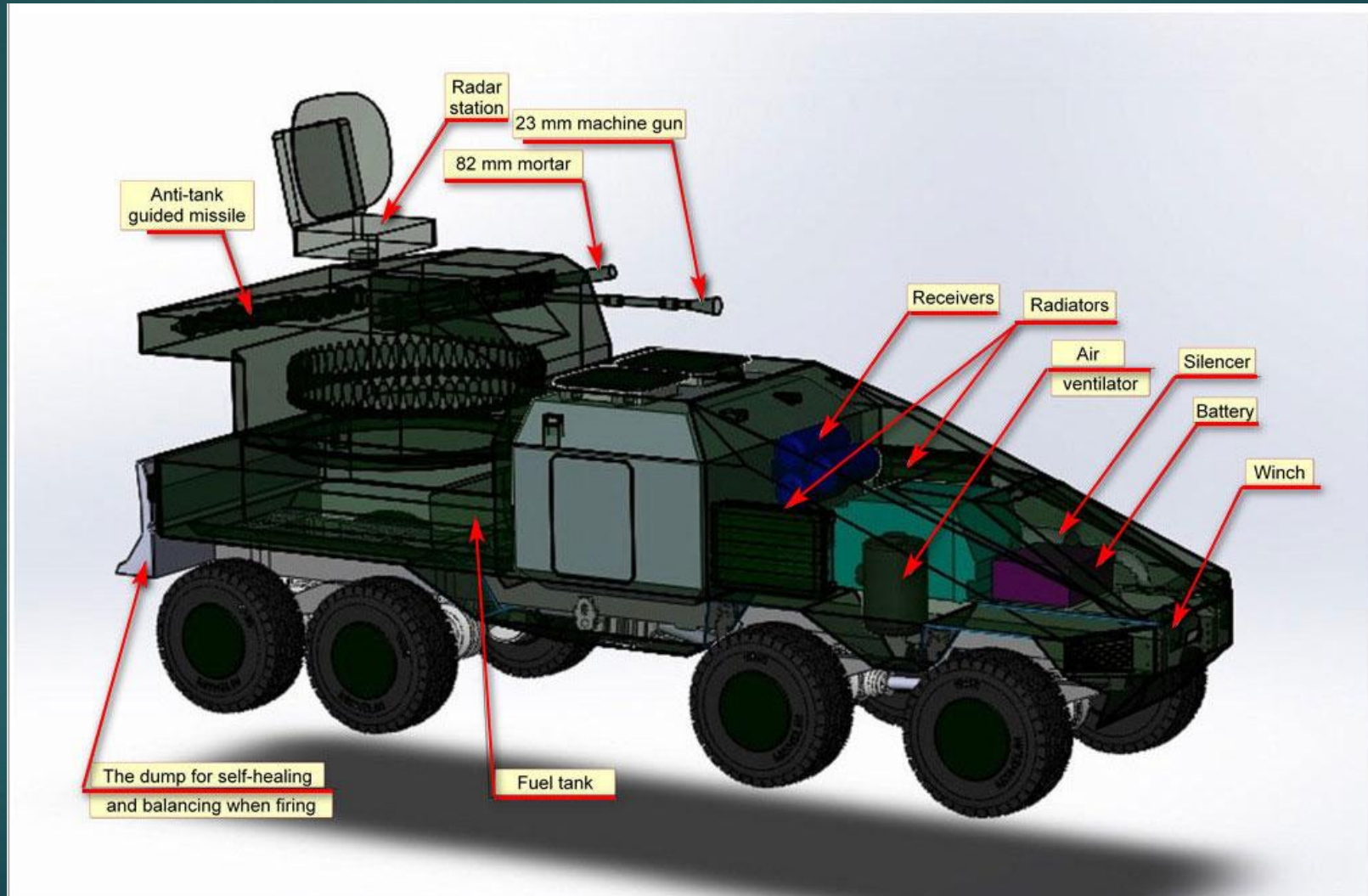
Purpose of the TVFS

The TVFS is engineered to perform a wide range of critical combat tasks, including:

- **Neutralizing enemy anti-tank personnel in urban, field fortifications, and rugged terrains.**
- **Countering mortar, grenade launcher, and sniper attacks, as well as enemy ambushes.**
- **Engaging lightly armored targets, clusters of vehicles, and field fortifications.**
- **Combatting single tanks, combat vehicles, helicopters, and UAVs.**
- **Conducting reconnaissance and deep raids into enemy territory.**
- **Supporting and protecting troop convoys on the frontline.**

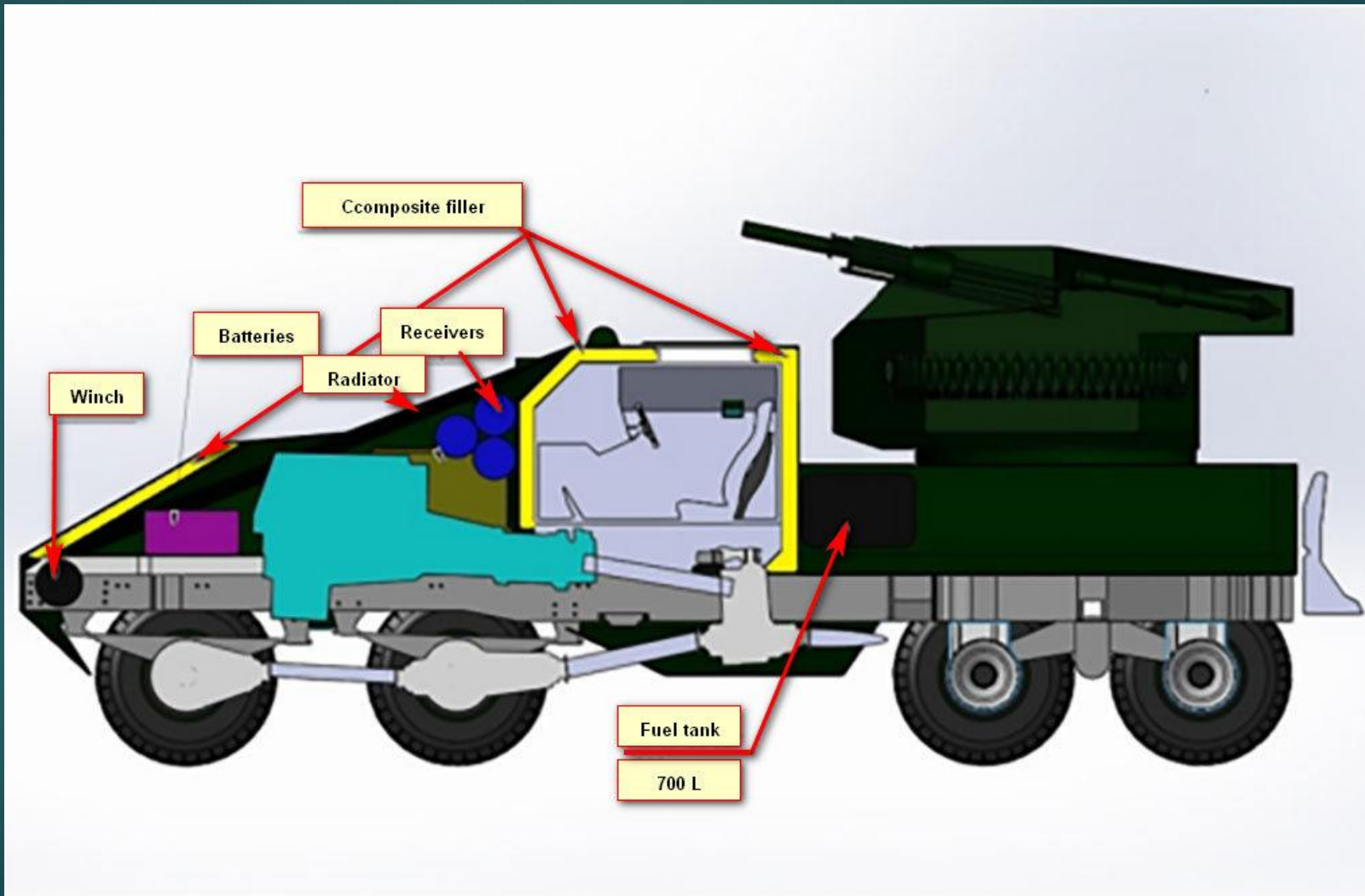
Design Features

The TVFS is based on a modular and robust design to maximize adaptability, firepower, and crew protection.



Design Features

The TVFS is based on a modular and robust design to maximize adaptability, firepower, and crew protection.



Chassis and Mobility

Four-axis wheeled chassis:

Bullet-resistant wheels ensure adaptability to various terrains and high survivability.

Chassis options:

Initial designs use a KrAF 8 × 8 platform with a Cummins 400 hp turbo-diesel engine and automatic transmission.

Maximum speed:

90 km/h on highways; range up to 700 km.



Armament

The TVFS offers an unmatched arsenal for tactical engagements:

82mm Automatic Mortar:

- **Type:** 2B9 “Cornflower” with modified auto-loading.
- **Rate of fire:** Up to 100 rounds/min.
- **Effective range:** 4,200–5,000 meters.
- **Special features:** Barrage capabilities to neutralize enemy ambushes in wooded or camouflaged areas.

23mm High-Speed Automatic Cannon:

- **Effective range:** Up to 3,500 meters.
- **Ammunition:** 600 shells.
- **Features:** Dual-axis stabilization for precision firing on the move.

Armament

The TVFS offers an unmatched arsenal for tactical engagements:

ATGM System:

- **Types:** “Stugna” or “Skif.”
- **Guidance:** Four missiles with advanced targeting systems.
- **Range:** Up to 5,500 meters with pinpoint accuracy.

Automated Targeting System:

- Integrates with fire control for rapid identification and engagement.

Crew Safety and Armored Protection

Armored Capsule:

- Houses the three-member crew: commander, driver-mechanic, and gunner-operator.
- Enhanced protection with a 100mm corundum-filled gap between the capsule and main armor to dissipate kinetic energy and cumulative charges.

Ballistic Protection:

- Safeguards against small arms fire and shrapnel.

Self-digging capabilities:

- Enhances stability during firing and provides self-recovery options.

Advantages

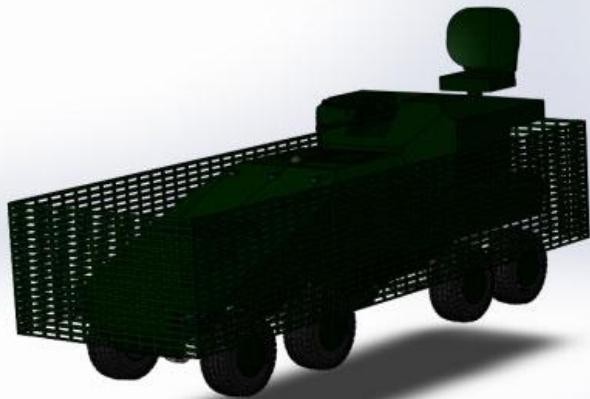
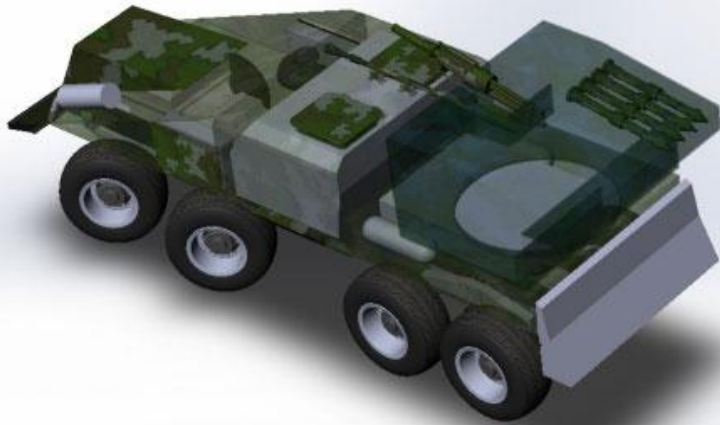
The TVFS provides unparalleled firepower and survivability on the battlefield. Key features include:

- ✓ **Large ammunition capacity** for prolonged engagements.
- ✓ **Automated weapons systems:** Reduces crew exposure and enhances operational efficiency.
- ✓ **Modular platform:** Allows for future upgrades and integration of foreign weapon systems, expanding export potential.

Technical Specifications

Maximum weight:	25,000 kg
Crew:	3 (commander, driver, gunner)
Engine:	400 hp diesel
Transmission:	Automatic
Speed:	90 km/h
Range:	700 km
Armament:	82mm mortar, 23mm cannon, ATGM system
Fire Control System:	Automated targeting

General view of Tactical Vehicle of Fire Support



Conclusion

The Tactical Vehicle of Fire Support represents a groundbreaking advancement in military technology for Ukraine. Its innovative design, modular construction, and superior firepower make it an essential asset for ensuring tactical superiority in modern warfare.

CONTACT PERSON: YURIY DONCHENKO

TEL: +38(096)554-8341

URADONKO3@GMAIL.COM

WWW.DONKOLAB.COM

