

KillFly

The Low-Cost, High-Lethality Counter-Shahed Rocket

Washtenaw Precision Engineering



April 24, 2024: KillFly's initial test launch reached supersonic speeds and demonstrated high accuracy.

The first of its kind, **KillFly** is a novel, light weight, production optimized C-UAS effector designed to be fired from Interceptor-UAS and crewed aircraft.

KillFly is designed to kill Shahed-136 at significantly lower cost than competing systems.

KillFly consists of: a transport and launch container (TPK); a lightweight and accurate unguided air-to-air rocket; a lethal, purpose-designed warhead; and off-the-shelf proximity + impact fuses.

Anyway You Want It, That's The Way You Need It:

KillFly is more adaptable than competitors. WPE's highly skilled engineering team and **KillFly**'s modular design ensure that we can quickly act on changing requirements and decisively deliver the product you need, when you need it.

Building on the Arsenal of Democracy:

Leveraging WPE's proximity to America's automotive-industrial heartland, off the shelf components, and a production optimized design **KillFly** can meet your volume requirements, whatever they are.

Any Target, Any Time, Any Launcher:

With a flexible engineering-first approach **KillFly** is tailored to meet end-user needs and evolve as requirements change. With our platform-agnostic design **KillFly** can integrate well with Ukraine's diverse field of UAS innovators.

Save the Sensor, Kill the Target:

KillFly keeps air defense economical and effective by moving complex sensors to reusable platforms. Instead of a costly guidance system, **KillFly** combines a highly accurate (yet inexpensive) unguided rocket with a purpose designed warhead and off-the-shelf proximity + impact fuse.

Stay in the Fight:

Recovering the launch platform (i.e. an interceptor UAS) allows Air Defense units to land, rearm, relaunch, and stay in the fight 24/7. **KillFly**'s low weight and high lethality give even a small interceptor packs a knockout punch.

If it Flies, it Dies:

KillFly's proprietary 5kg blast-fragmentation warhead can be configured to direct shrapnel forward, sideways, or both. The inherent accuracy of the rocket, combined with dual proximity/impact fusing and over 1000g of steel shrapnel ensure **we don't just shoo flies, we kill them.**

KillFly By the Numbers:

Only **KillFly** has the combination of cost, lethality, all-weather capabilities and area coverage needed to meet the Shahed-136 threat, and hedge for the future against Shahed-238!

Rocket	Shahed 136 [TARGET]	KillFly + Interceptor UAS	APKWS	LMM Martlet	Stinger	LIG Nex1 Poinard	Anti-Drone FPV	ZU-23-2 (2A14) Anti-Aircraft Gun
Mass (AUR)	N/A	<10kg	88kg (4 shot)	13kg	15.7kg	≈95kg (4 shot)	c. 10kg	35.5kg (box)
Mass (rocket)	200kg	<7.5kg	≈16kg	15kg (est)	10.1kg	≈17.5kg		.190kg
Warhead Mass	50kg	5kg	4.5kg	3kg	3kg	4.5kg	4.5kg	.018kg
Speed	185 kph	c. 880-900 kph	1850 kph	1850 kph	2700 kph	1850 kph	200-300 kph	STATIC
Fusing	Contact, Proximity	Proximity, Impact	Impact or proximity	Proximity	Proximity, Impact	Impact	Impact	Impact
Weather	All Weather Day/Night	All Weather Day/Night	All Weather Day/Night	All Weather Day/Night	All Weather Day/Night	All Weather Day/Night	Day/Fair Weather	Day/Fair by default
Price	\$50,000	\$7500-8300 (full rate production) \$10,400 (prototype / LRIP)	\$22,500 to \$25,000	\$30,000	\$120,000	\$31,000-\$43,500	c. \$2000-5000, more for thermal camera	c. \$2500 per box, two boxes per mount
Range	c. 2500km	500-1500m + 50-100km UAS range	±5km	±8km	5km	8km (Surface to Surface)	10-20km (estimate)	At most 2500m
Guidance	GPS	Unguided, sensors on Interceptor UAS	Semi-Active Laser	Laser Beam Riding	Infra-Red (non-imaging)	Imaging IR + INS and Laser	Visual, FPV controls	Visual if not upgraded

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