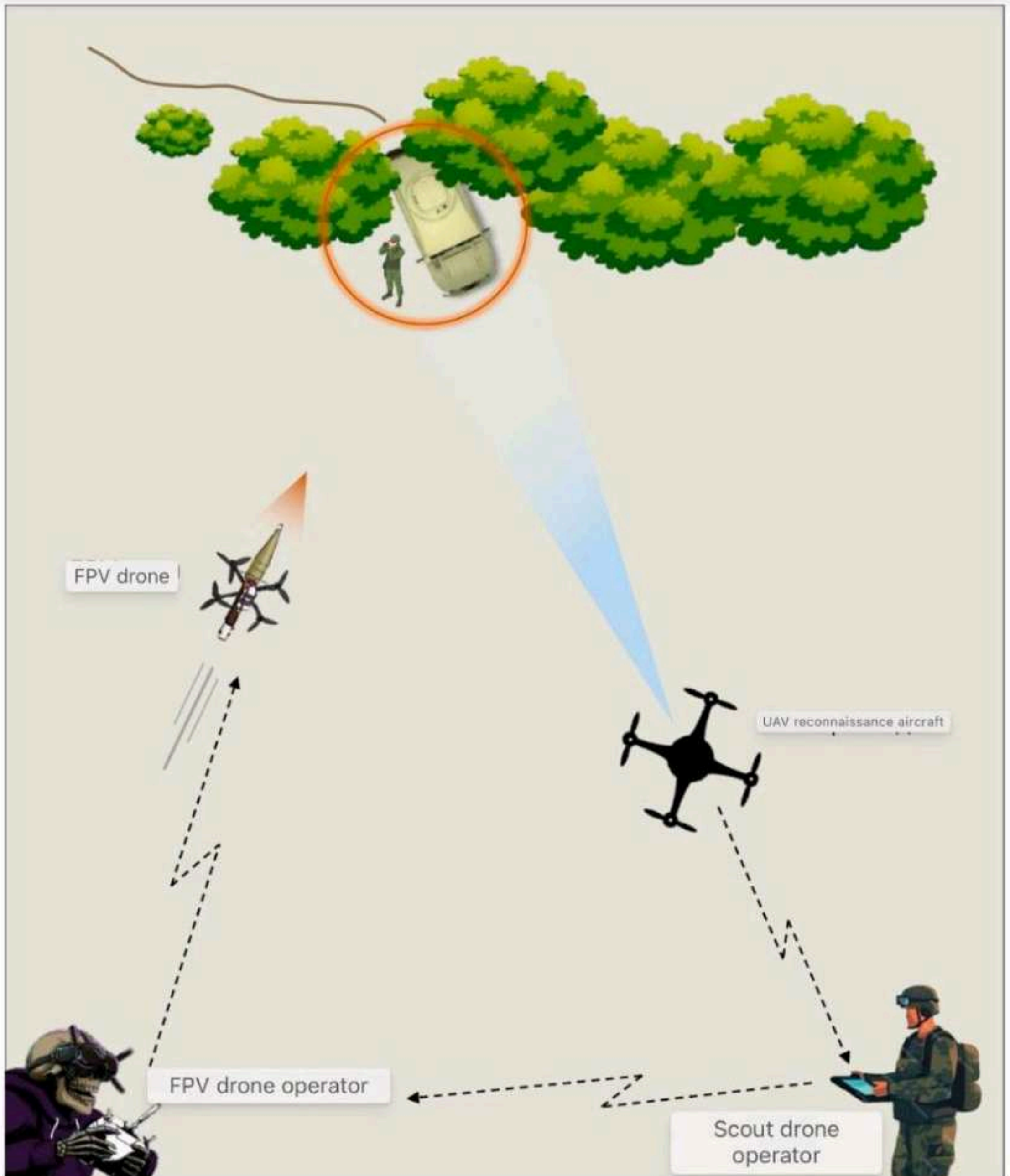


. Tactical methods of using FPV drones

1. "Classic"

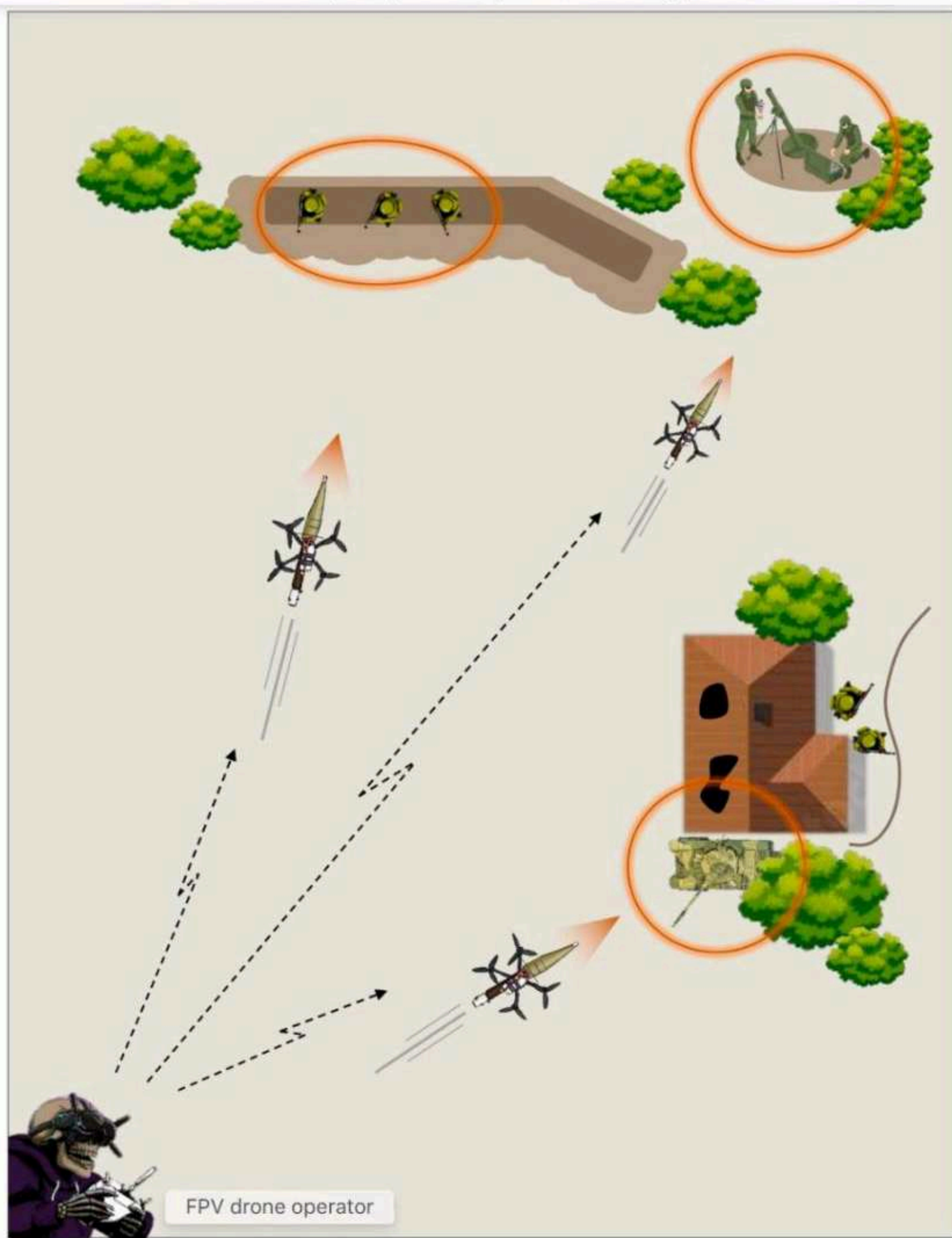
(detection of the target by the UAV by the reconnaissance - the launch of the drone and its defeat)

The most common method of combat use. It consists in detecting the target by a scout drone and transferring coordinates to the FPV operator for its destruction. Video recording of the defeat of the object is carried out by the UAV-reconnaissance-com.



2. "Free hunting" (FPV strike on pre-detected objects and positions)

The essence of this method is to strike on your own FPV drones on pre-opened objects and enemy positions.



3. "FPV-roy"

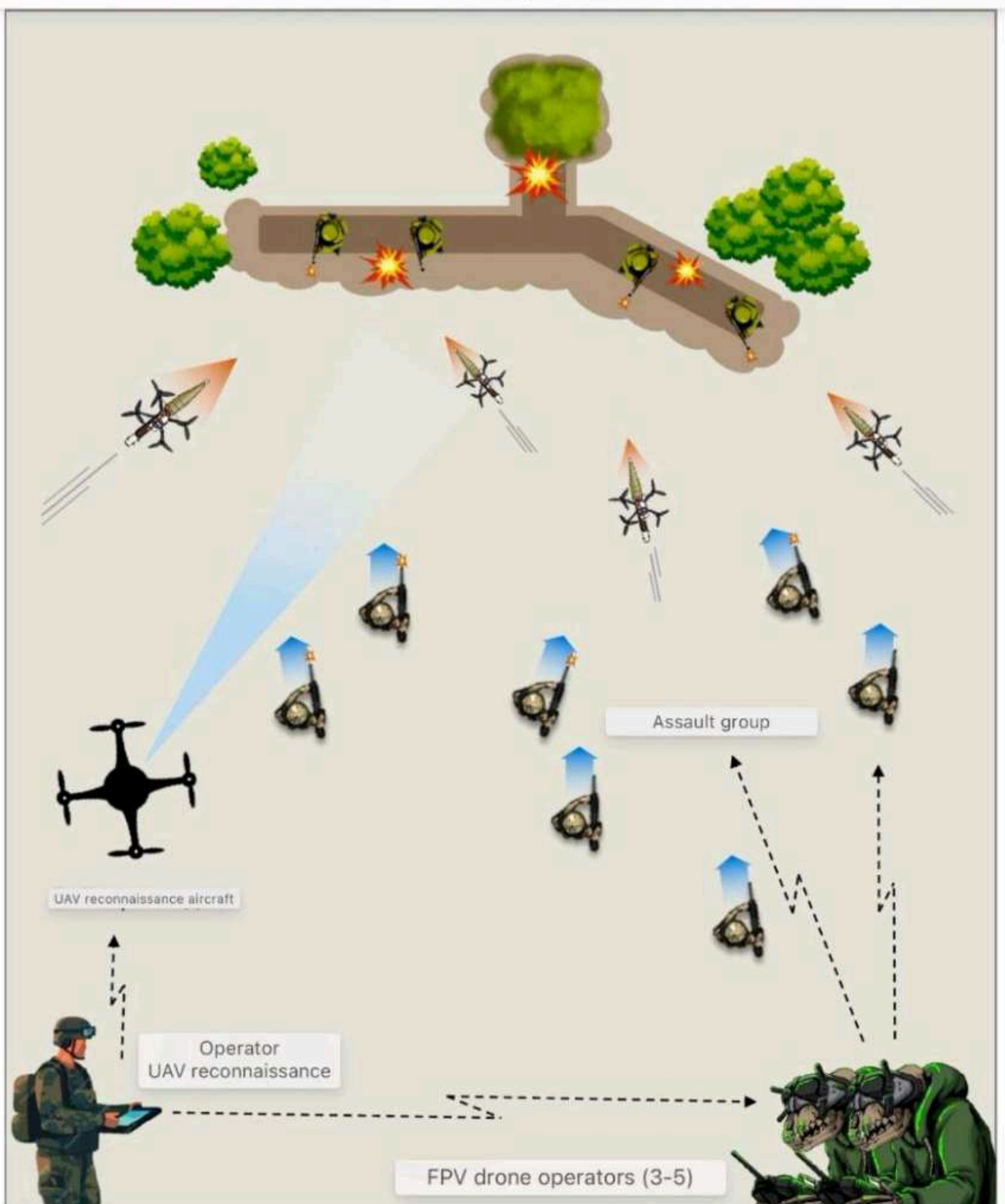
(FPV group strike on selected targets, objects)

The method is based on the opening of targets (objects) by the UAV scout and the mass impact of kamikaze drones in order to defeat them. As a rule, the total consumption is 5-12 devices. Video recording of the defeat of the object is carried out by a reconnaissance drone. A combination of FPV drone strikes with artillery and mortar fire is possible.



4. "Support of the attack of the assault group with FPV drones" (fire support of the actions of the advancing units)

This method consists in a sequential attack on positions by FPV drones during the advance and offensive actions of the assault group. Control and coordination of the actions of units and operators is carried out through the UAV reconnaissance aircraft. A combination of FPV drone strikes with artillery and mortar fire is possible.

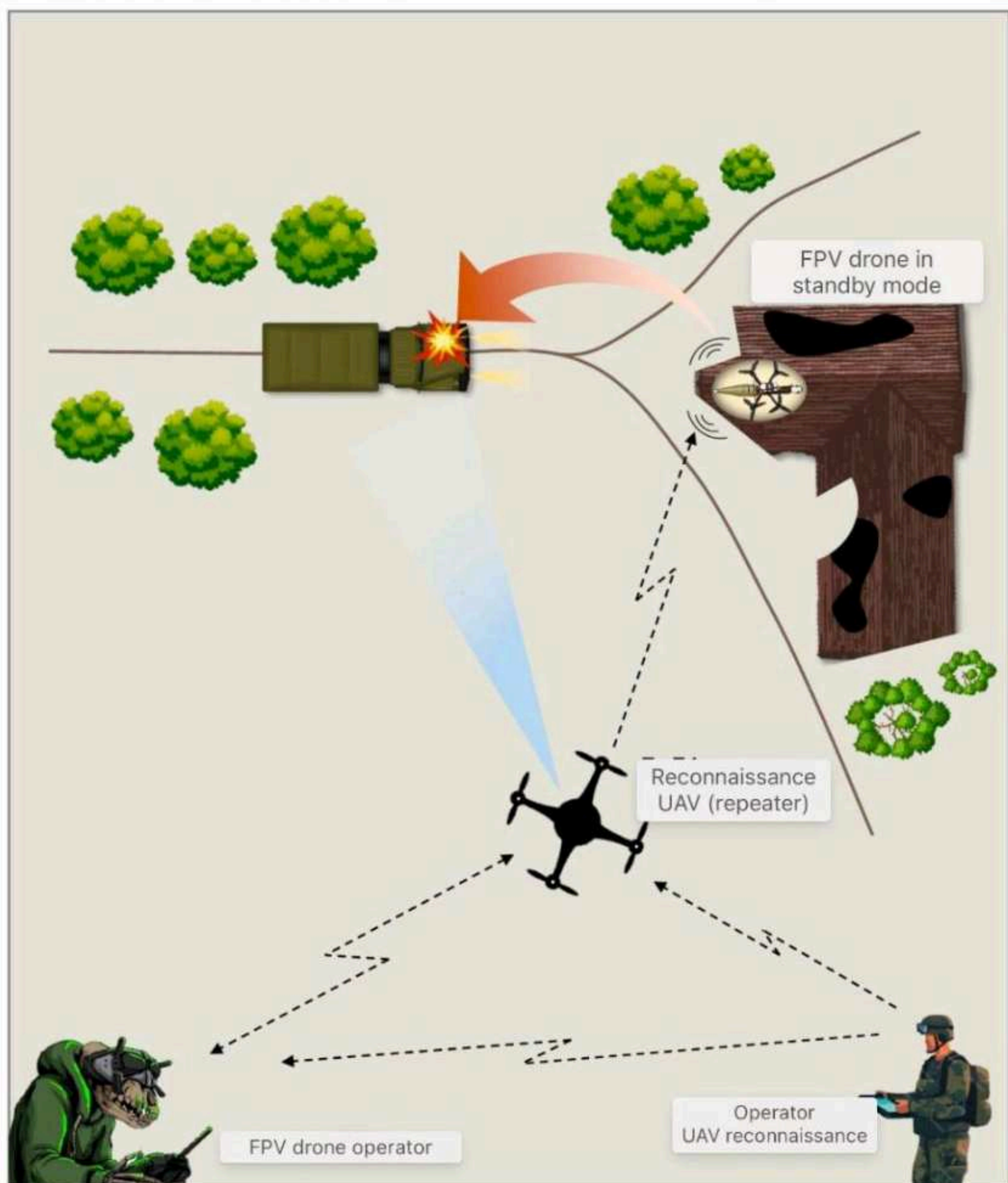


5. "FPV drone in ambush" (Landing and waiting - observation - sudden attack on the target)

The tactical technique is based on the landing and occupation of a hidden position by the FPV drone near roads with heavy traffic, intersections, places of possible accumulation of equipment and personnel with the subsequent sudden attack on the target.

When working in a pair with a UAV repeater (reconnaissance): depth - more than 5 km, waiting time - up to 6 hours. (only the control channel receiver is included). At night, attacks on the headlights of moving vehicles are possible, or the use of FPV drone with a thermal imager.

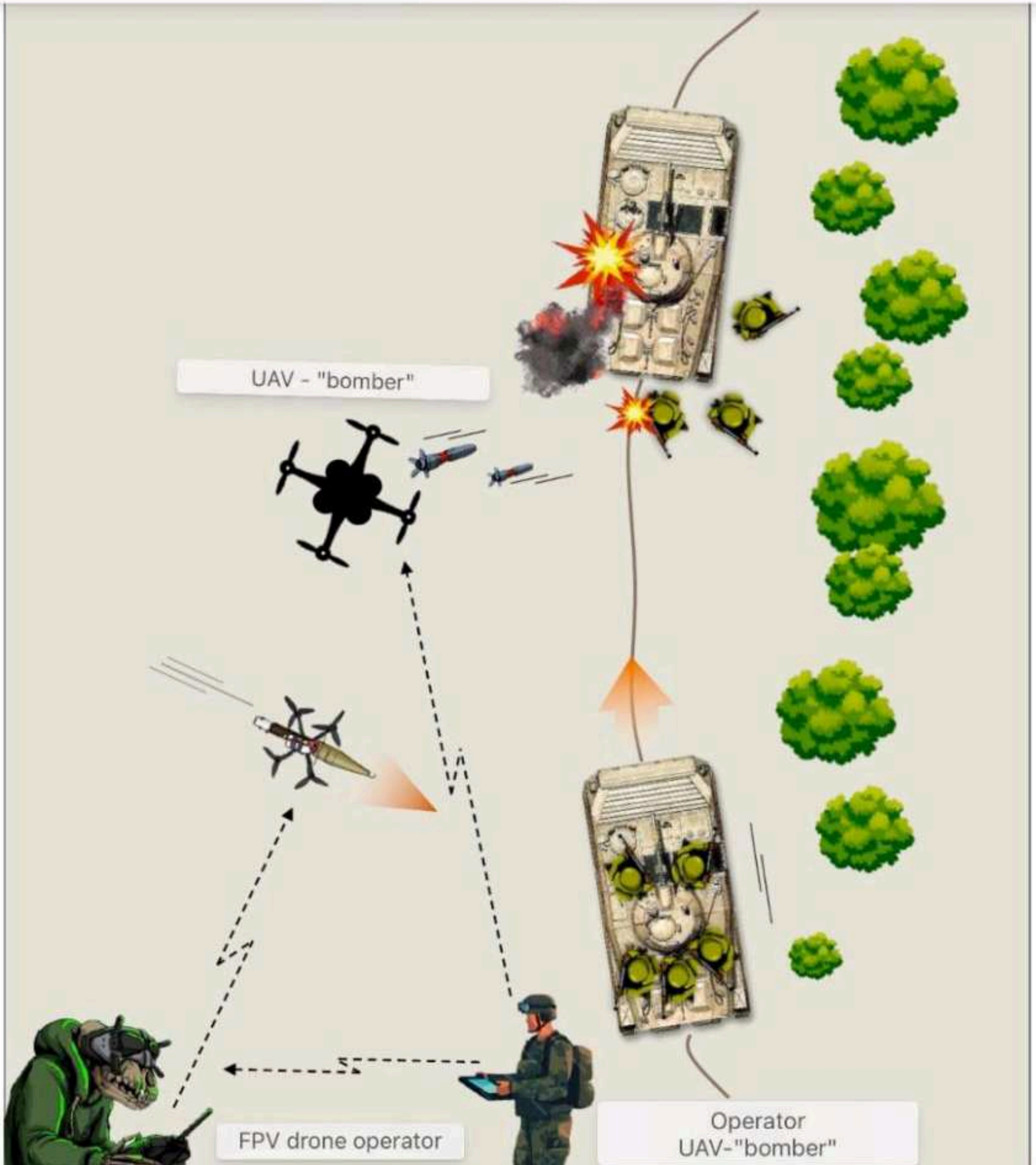
FPV-дрона с тепловизором.



6. "Combined strike"

(FPV strike on the target - ammunition drops from a drone "bomber")

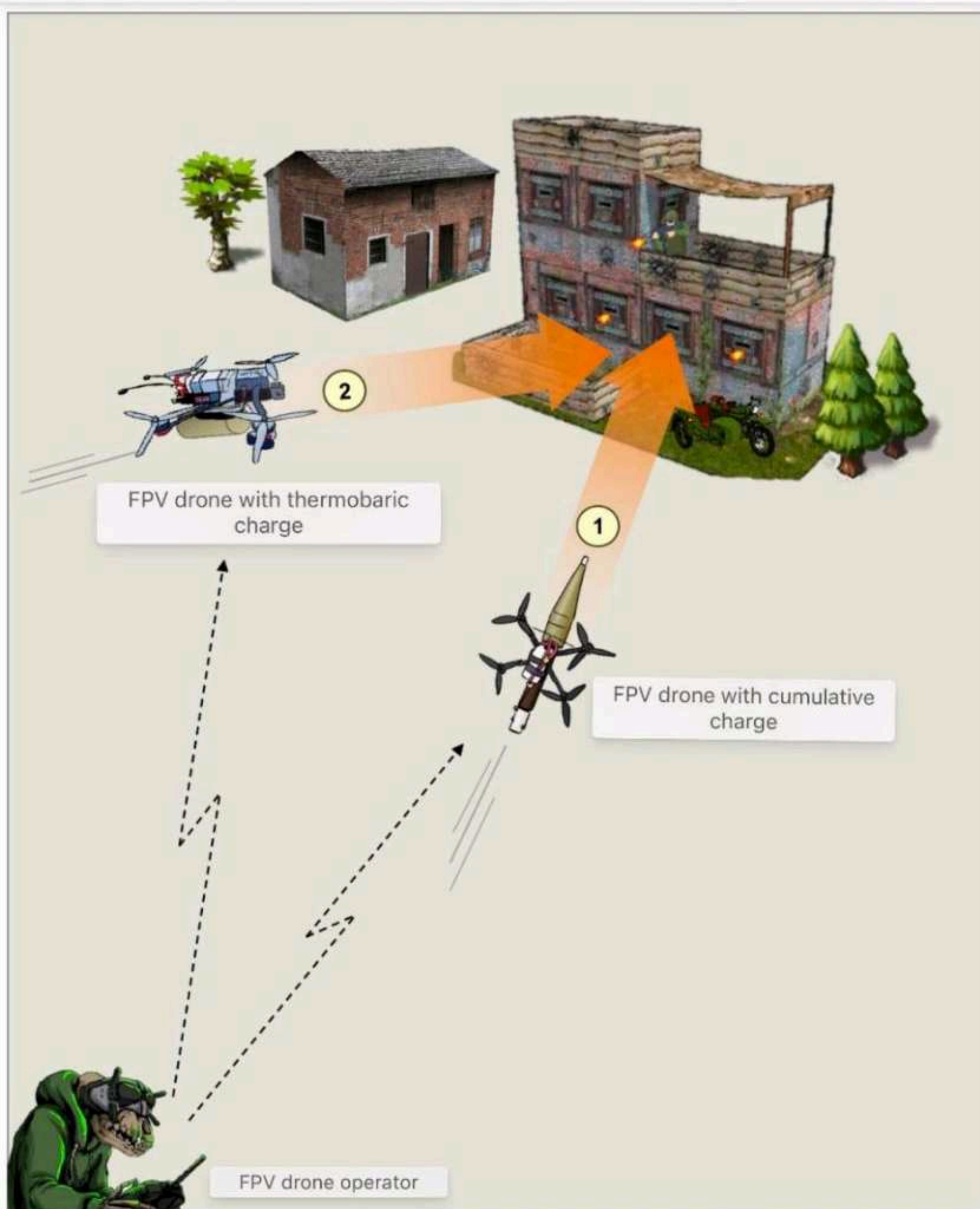
This method consists in solving the joint task of FPV drones and BiLA "bomber" to inflict complex fire damage to identified targets. After the destruction (disabling) of armored vehicles (object) by an FPV strike, the drone "bomber" drops ammunition on personnel during evacuation. As another option: inflicting fire damage on personnel (unarmoured vehicles) by discharges in order to immobilize them, subsequently - the use of FPV drones.



7. "Double blow"

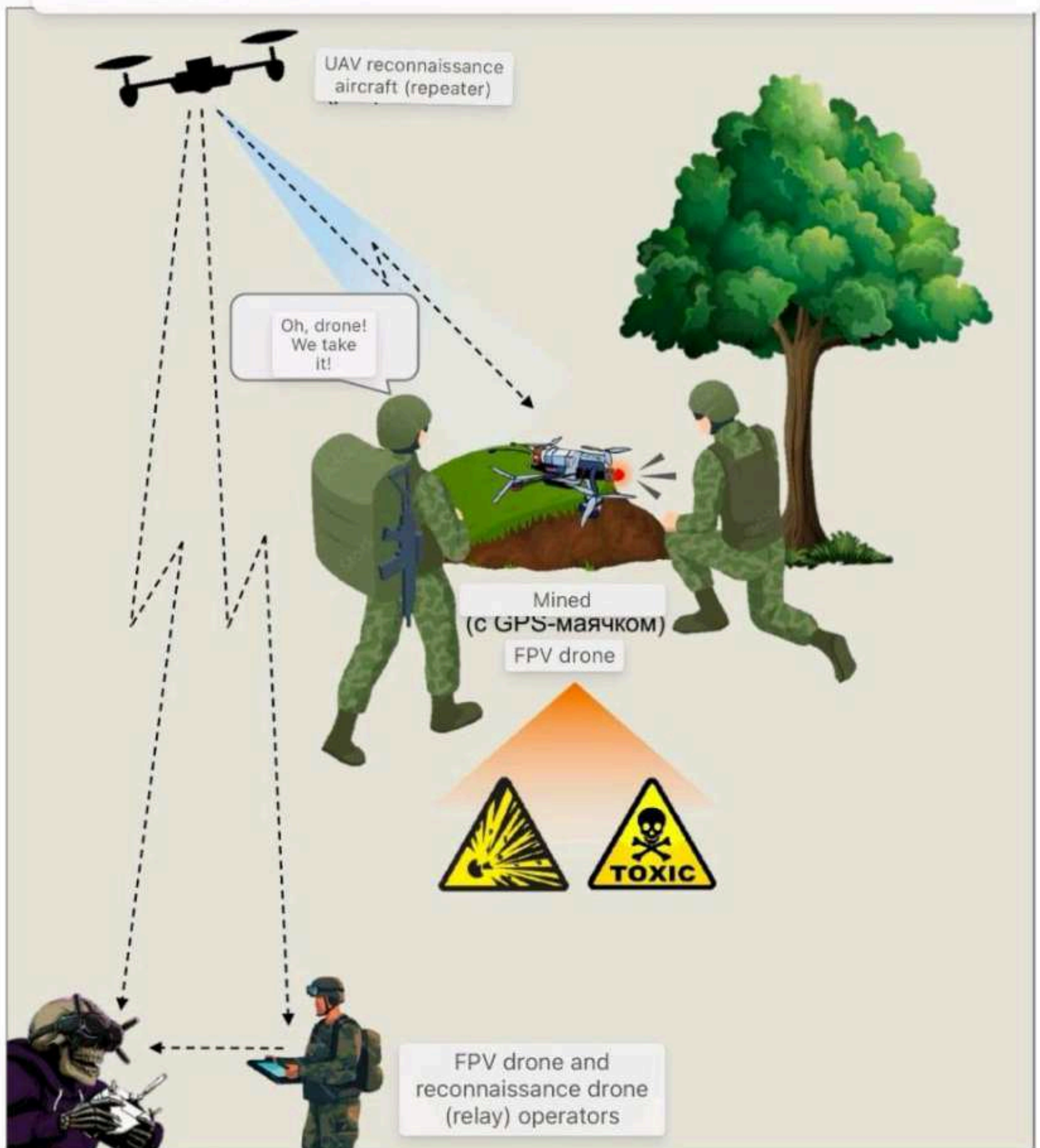
(The use of two or more FPV drones with different charges to make a hole in the shelter and destroy personnel)

In order to destroy manpower in protected shelters, several FPVs are successively used: the first with a cumulative charge - to break through the obstacle, the second, as a rule - thermobaric or shrapnel action to inflict fire damage to personnel indoors.



8. "FPV trap" (options)

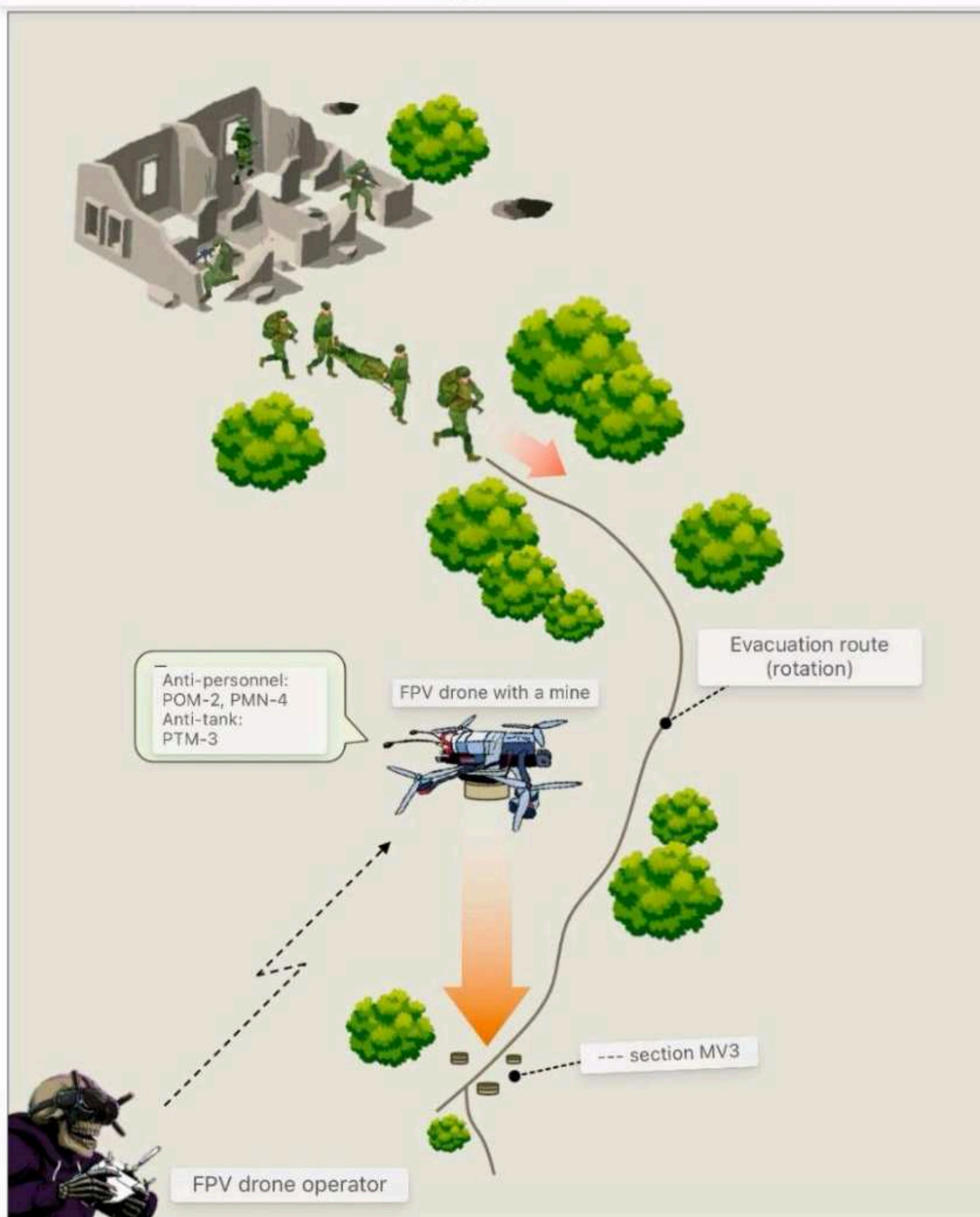
- * landing of the drone and sound signal - when approaching (capturing) by the FPV operator, a controlled explosion is carried out through the UAV reconnaissance (repeater);
- * when changing its position (due to a "jonic" device) - self-detonation (in addition, it is possible to install a magnetic target sensor on metal);
- laying a 20-50 g charge into the drone design, which is activated during its dismantling,
- * built-in GPS beacon, its tracking and "arrival" to the signal location,
- treatment of the FPV drone body with potent toxic substances of skin-aberent action



9. "FPV-miner"

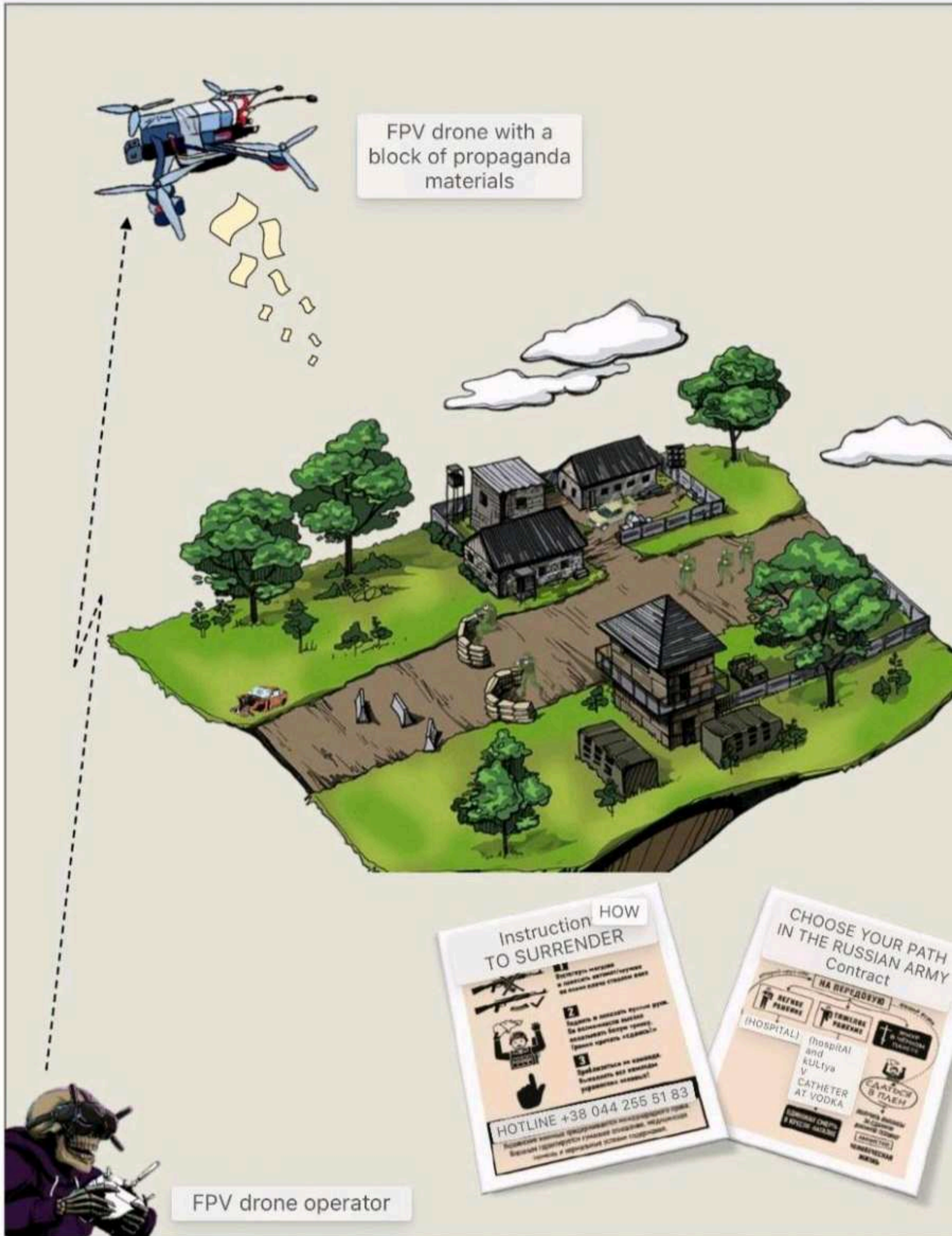
(Delivery and installation of anti-personnel (anti-tank) mines masked by IEDs on rotation and evacuation routes)

This tactical technique is used for the hidden installation of anti-personnel, anti-tank mines by FPV drones, as well as disguised IEDs on rotation routes, evacuation routes or near positions (objects) to destroy manpower and equipment.



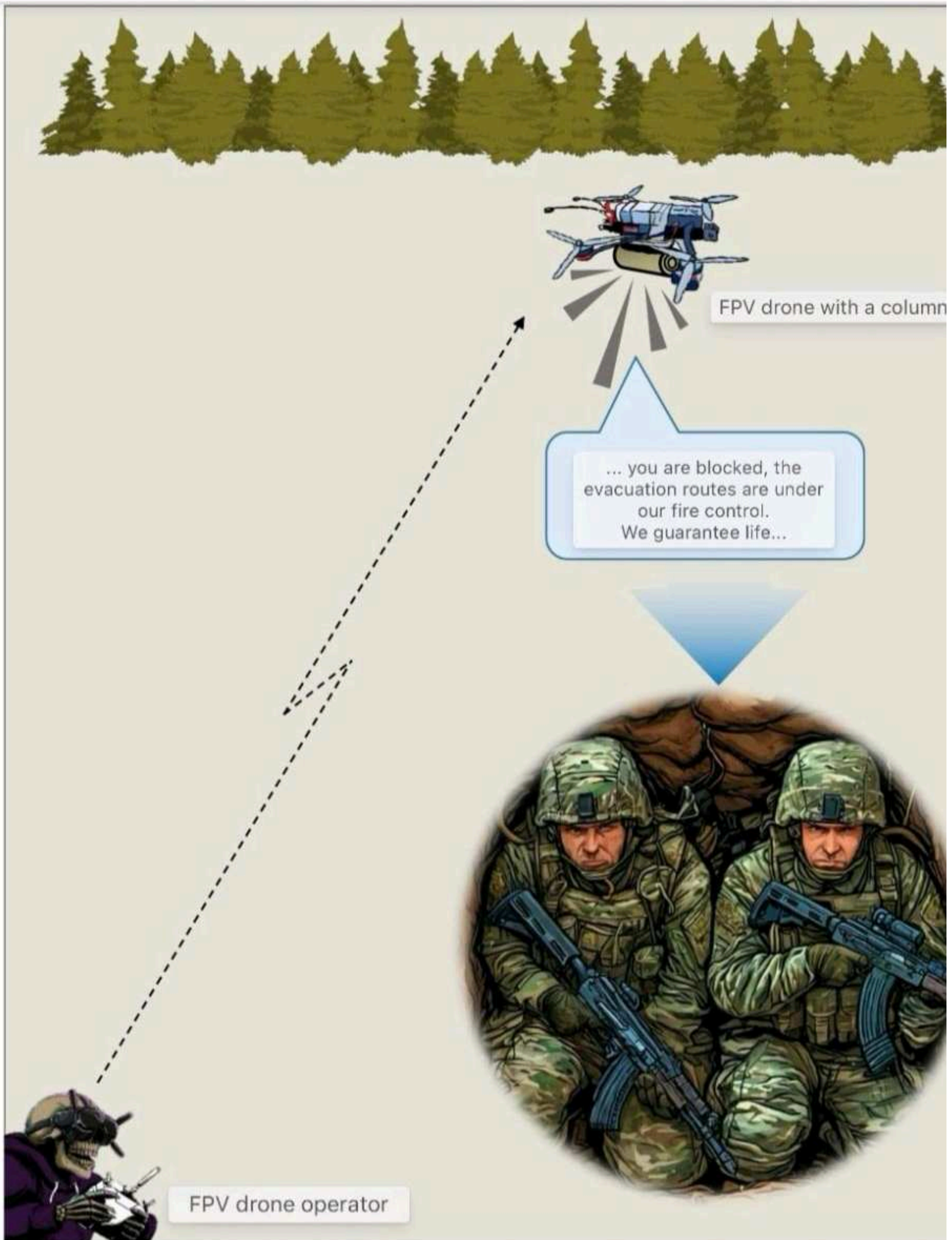
19. "Flipping"
(Soros from the FPV drone leaflets at the enemy's position)

As part of the information and psychological impact on personnel and the population, FPV drones are used by the enemy to drop leaflets. The weight of the laid printed products is up to 2 kg (about 200 leaflets).



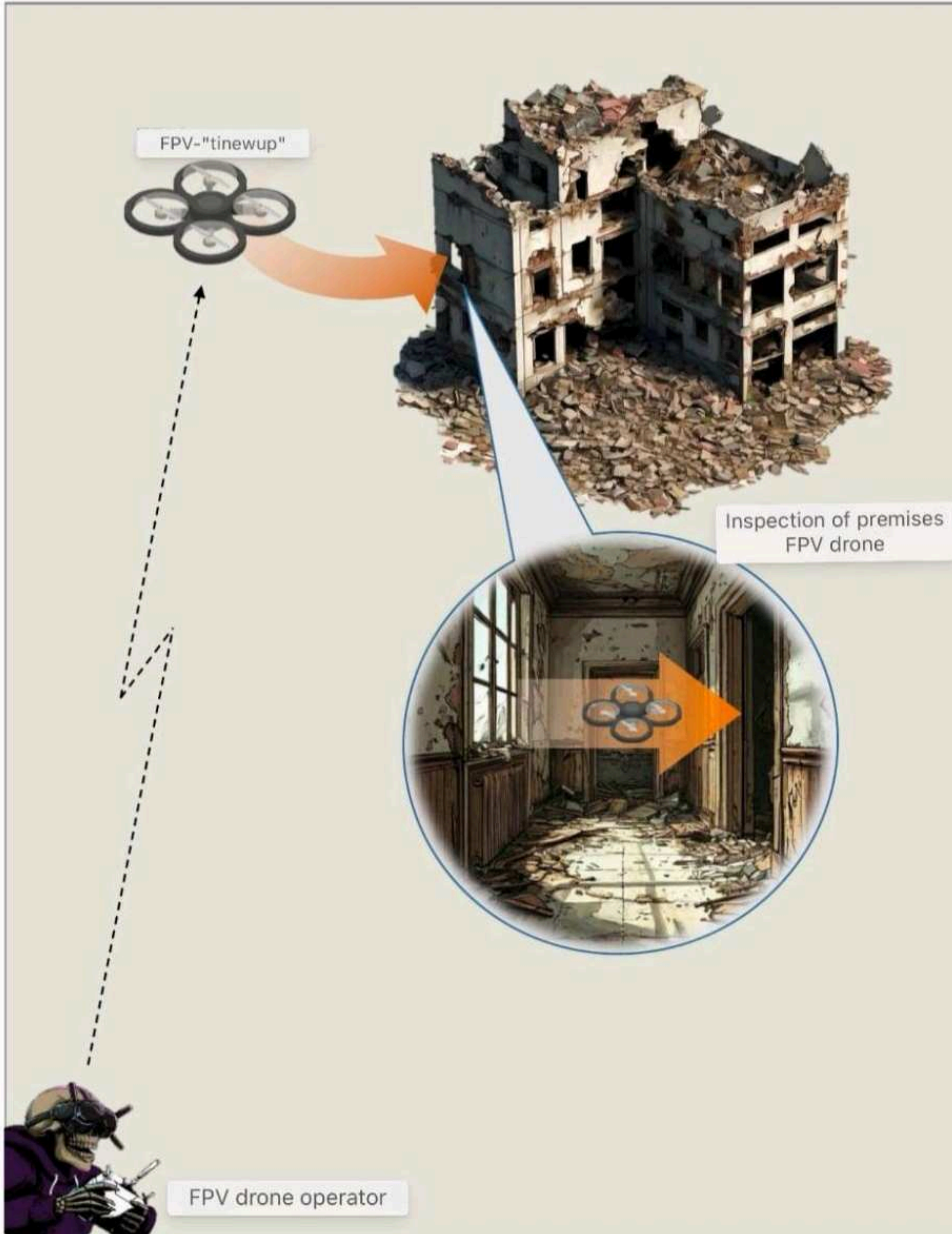
18. "FPV-matyugalnik"
(Informational and psychological impact on the enemy)

In order to reduce the moral and psychological state of the personnel and for surrender, FPV drones with speakers for broadcasting sound messages are sent to the positions. The height of the hang is up to 50 m.



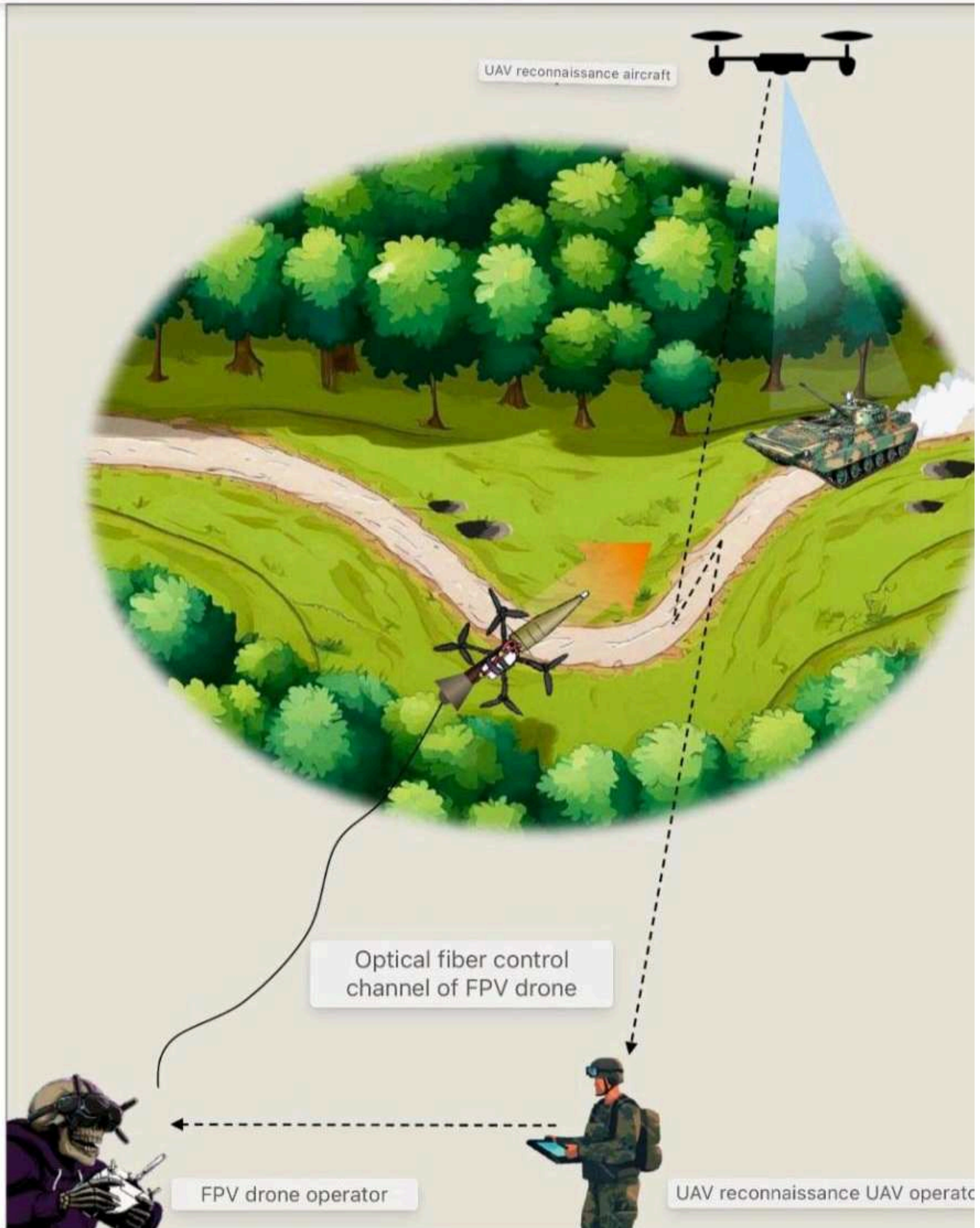
17. "Inspection of buildings" (Control of premises inside buildings)

To detect the enemy and control the interiors in buildings during assault operations, drones "tinivupa" (microcopter with blade protection) of short-range are used. General performance characteristics: dimensions up to 100 mm in diameter, weight - up to 5 g, flight time - up to 4 minutes. Communication range (in buildings) - up to 500 m.



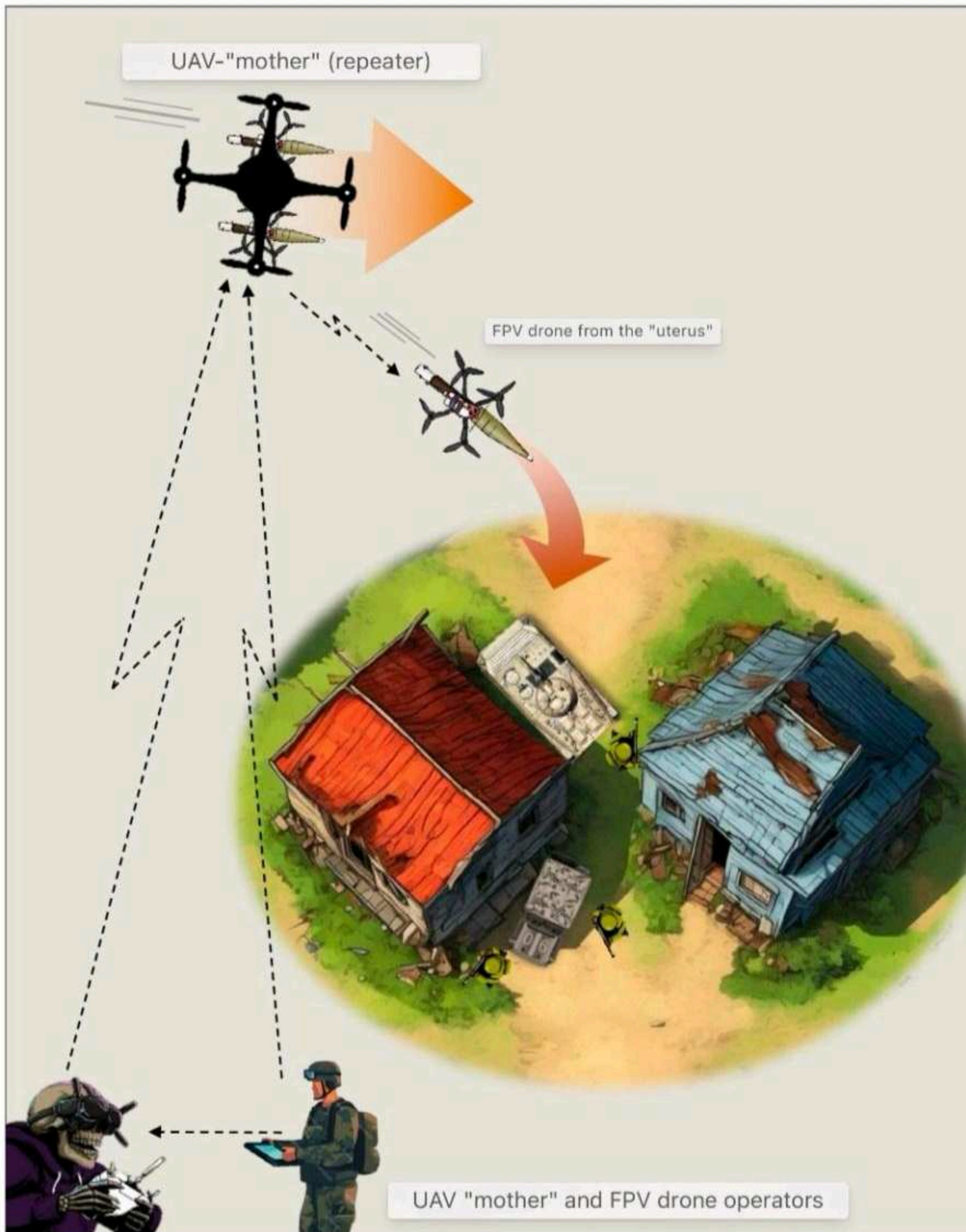
16. "FPV-on wires"
(Ensuring sustainable drone management)

To ensure sustainable management of the FPV drone from exposure to fun EB and guaranteed target damage at a range of up to 10 km (in some samp up to 25 km) are introduced by UAVs on a fiber-optic cable. A characterist feature of their use is the clarity of the video image to the end point of the route. Features of application - prevention of sharp maneuvers, avoidance fires on the route.



(Increase in the range of combat use)

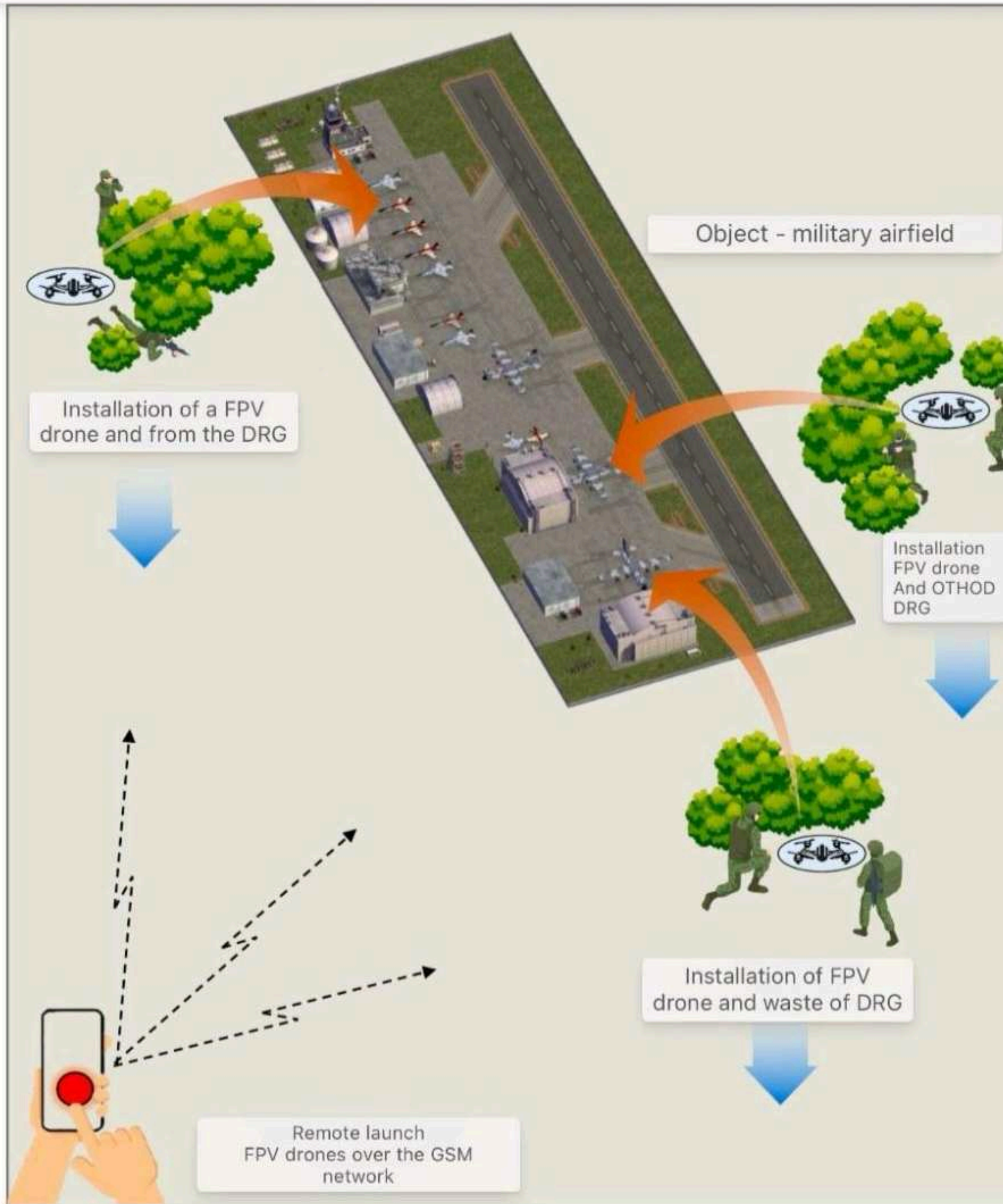
In order to increase the range of combat application of FPV drones, The UAV is a "mother" of both aircraft and "copter" type, which also act as a repeater. The total load capacity is two or three FPV. At the same time, the range of their use (depending on the type of "uterus") can be up to 60-70 km. In addition, unmanned boats (BEK) can act as a "mother" for FPV drones.



14. "FPV-saboteur"

(Hidden installation of DRG FPV drones at objects in the rear - remote activation of them according to pre-loaded coordinates)

This method of using FPV drones is used by the DRG to destroy (disable) military equipment and enemy facilities. After the hidden installation of the DRG of "kamikaze" drones (4-6 pcs.) near the object at a distance of up to 3 km and switching to "waiting" mode, the UAVs are activated remotely by GSM network signal to strike targets in accordance with the pre-loaded coordinates.



13. "FPV-PVO" (UAV destruction)

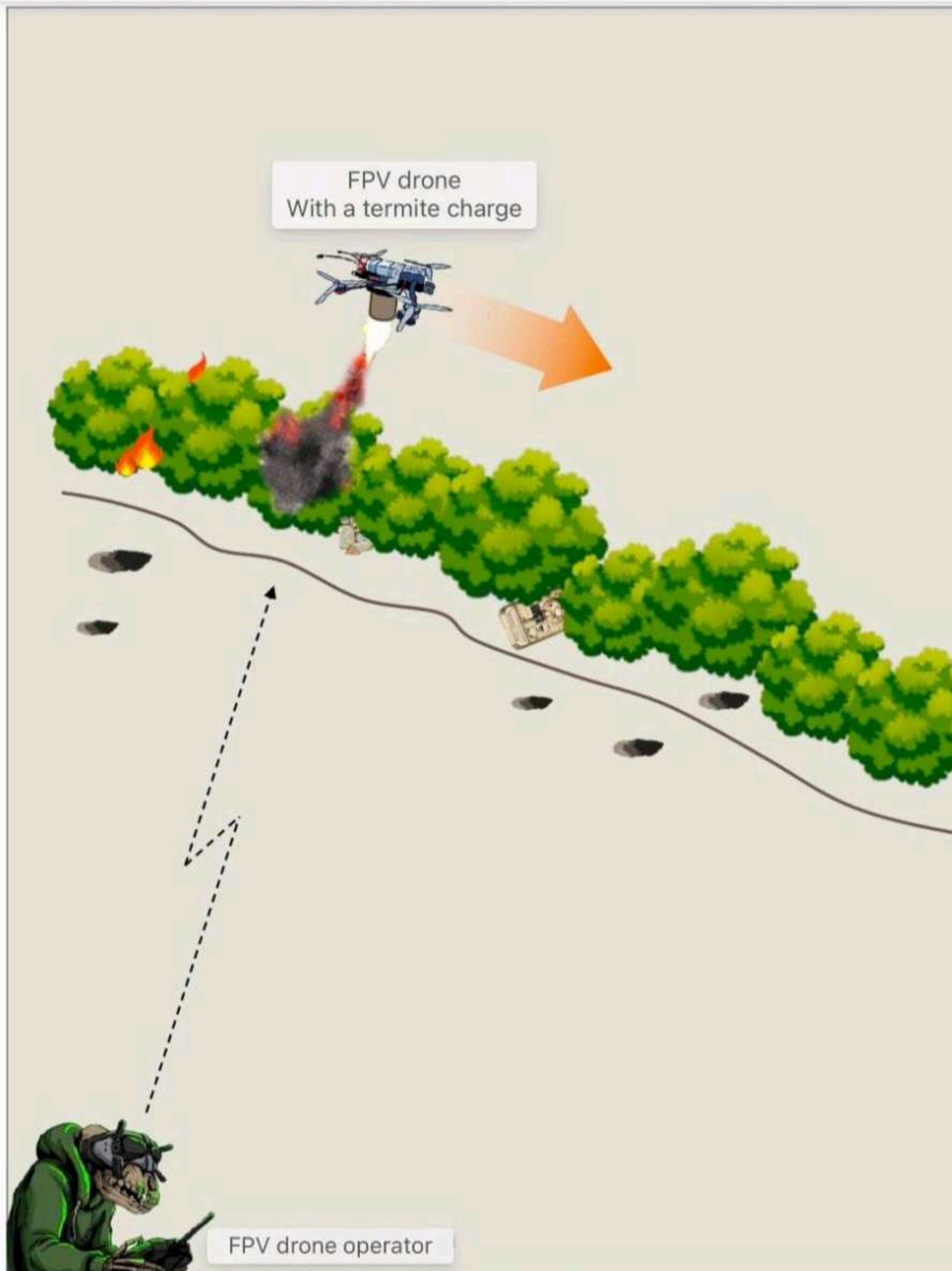
FPV drones are used to combat aircraft-type reconnaissance UAVs and hexacopters. When BiLA is detected by radio engineering means (height of actions - up to 3 km, speed - up to 110 km/h), FPV drones are launched to intercept and destroy them. The disabling of the BiLA is carried out by detonating the fragmentation charge when approaching or ramming. Targeting is carried out by the radar operator.



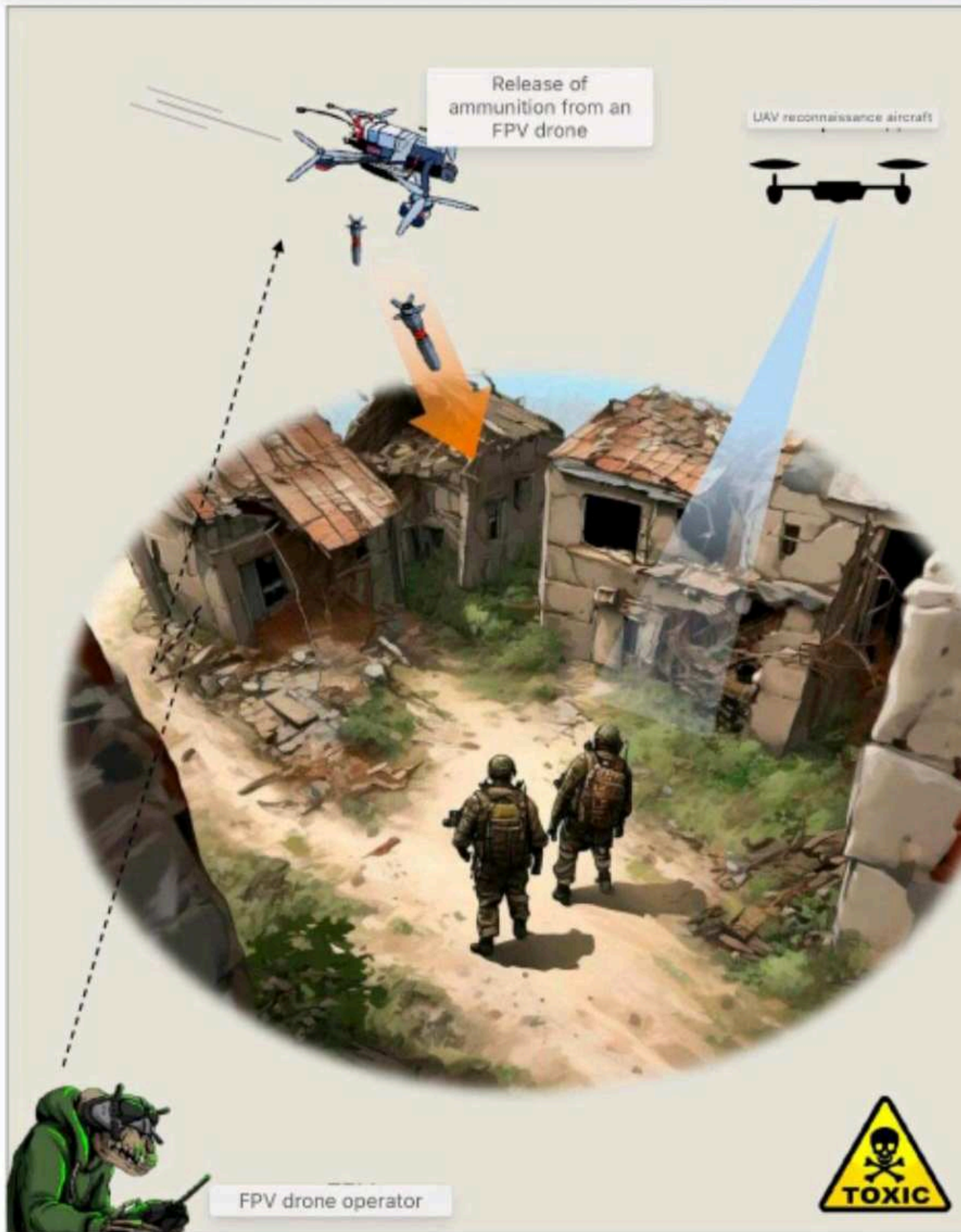
12. "FPV Dragon"

(Spraying the incendiary mixture over the enemy's positions)

For the purpose of arson and disabling personnel, equipment, open-plan ammunition and property, an FPV equipped with a termite charge (based 120-mm artillery incendiary ammunition) is used. The average height of spray the incendiary mixture is 20-50 m. Burning time - up to 2 minutes, temperature over 2300 degrees. S.



The tactical technique is to drop ammunition from an FPV drone to destroy personnel in an open area or in a poorly protected shelter ("hole"). The reconnaissance UAV aims FPV at the target. Cases of use of ammunition with poisonous substances have been recorded. In addition, this method is often used to dump useful goods to their troops.



10. "FPV-sapper"

(Dumping of ammunition or installation of an overhead charge on mines)

Demining of the terrain, usually roads and trails, is carried out by dropping ammunition from an FPV drone or installing an overhead charge on open and uncamouflaged mines.

