

Army of the Future: The IDF's Unmanned Vehicles

Unmanned vehicles (UMVs), whether in the skies, waters, or on ground, are indispensable tools for the surveillance of enemy activities, without putting one's own forces in danger. Find out more about two outstanding UMVs and read for yourself what IDF commanders have to say about these incredible machines.

The Eye in the Sky – The Eitan Drone:

The Eitan was developed in Israel and unveiled for the first time to the general public in late 2007. With a wingspan of 26 meters it is as wide as a Boeing 737, but the Eitan can do much more than just fly. It is a medium-altitude, long endurance UAV, meaning that it can operate above altitudes of commercial air-traffic and can stay in the air for a flight-time of up to 36 hours. All weather capabilities, an automatic de-icing system, automatic takeoff and landing systems and a wide array of sensors which can be equipped to the Eitan's belly, nose and wings, make it an extremely versatile reconnaissance platform.

"A large percentage of the IDF's operational flight hours are performed by UAVs, sometimes even most of them. At any given time, 24 hours a day, seven days a week, there are drones in the air performing activities that IDF forces are engaged in." says Lieutenant Colonel Ido, commander of the Israeli Air Force's UAV training center.

"Our drone operators are extremely carefully selected. Within split-seconds they have to make life and death decisions and have to distinguish between terrorists, women, children, or our own troops. They sit in a safe room and their personal level of danger is the same as of someone on the beach in Tel Aviv. This kind of decision-making requires someone with a very orderly set of values: they know exactly what is right and wrong."

A Loyal Partner – The Guardium

Guardium UGV is an autonomous observation and target interception system, developed and produced in Israel. It is based on a TOMCAR chassis, capable of carrying payloads of up to 300 kg including a vast array of electronic instruments, armor and different weapons systems. It can be operated from a command center, but can also run patrol on predetermined routes without human intervention.

In case of suspicious activity, the Guardium can quickly respond and hold the suspicious elements back until manned troops arrive, or use various forceful methods to eliminate the threat. Its many sensors, including video and thermal cameras with auto-target acquisition, sensitive microphones, powerful loudspeakers and a two way radio, combined with a top-speed of up to 80km/h make the Guardium a very reliable partner on routine patrols in dangerous environments.

In addition to all of their amazing capabilities, UMVs allow their operators to stay safely behind enemy lines, giving them the ability to remain calm in critical situations and make calculated, carefully weighed decisions without the pressure of being under fire themselves. This distance to the battlefield can not only save the soldier's life, but also that of innocent civilians.