

Products developed in-house by service innovators catch eyeballs

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Col. Ashish Dogra and Lt. Col. Prashanth Agrawal with the Ten AI Weapon System. | Photo Credit: special arrangement

An artificial intelligence weapon system developed in-house by Indian Army personnel has been receiving a steady stream of inquisitive visitors. What is now being seen as a path-breaking weapon system that has completed field trials, promises to enhance border surveillance, especially to prevent infiltration of terrorists.

Secondary vision

The movement of terrorists in the bushy and jungle terrain in Kashmir, which is difficult to capture, will be now done through secondary vision technology. The Ten AI Weapon System (TAIWS) developed by Col. Ashish Dogra and Lt. Col Prashanth Agrawal of EME in

association with IIT Bombay and students of MIET, Jammu, has completed field trials and after certain modifications is expected to be developed in the Line of Control.

These are products developed in-house by “service innovators” based on the need, enhance operational requirements and improve efficiency, an officer in the Army Design Bureau said.

The secondary vision technology is integrated with the medium machine gun, which has a killing range of 2 km. “The gun is already available with the Army. Even the gun can be changed if needed. The gun has been integrated with secondary vision technology ... The ground reality on the border spurred the development of the new system,” said Col. Dogra.

It has a thermal camera for the night and an optical camera for the day, and has a visual range of 2 km at night. Currently, work is on to get the IP 65 rating to withstand rough environmental conditions. “Currently, it is a static version and efforts are now on to develop the same technology for unmanned ground vehicles,” he said.

Getting set for induction

Among the others being readied for induction are the 50-metre footbridge which could be laid across the water body in less than one hour, and that could be critical in times of emergencies. The product has been contracted by the army for production.

Another 9mm sub-machine gun has also been developed by a serving Indian Army officer, and about 550 guns have been inducted already. An order to procure 6,000 guns has been issued. The new SMG will be useful in close-quarter battles. Sources said India imports 9 mm calibre guns, and that induction of the 9 mm gun developed in-house could reduce import and dependency.

12 products get IPR

The Army Design Bureau, which is spearheading the development of niche products for the requirement of armed forces, has filed for the registration of 75 IPRs of which 12 have been granted the IPR, bureau officials said. The products have been designed and developed in-house by “service innovators” or funded by the Army Technology Board. Currently, the board is funding 100 projects of which 75 are in final stages.

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