



Drone of '3 Idiots' could now serve Army, NSG; DRDO in talks

Raghvendra Rao Posted online: Thursday , Feb 11, 2010 at 0832 hrs

Manesar : The Unmanned Aerial Vehicle (UAV) that grabbed eyeballs in the Aamir Khan-starrer 3 Idiots could soon be used by the Indian Army and a host of security forces, including the National Security Guard (NSG), for reconnaissance in anti-terror and counter-insurgency situations.

The machine that the student of engineering designed in the film — and which tragically found him hanging in his room on its maiden flight — is the same as the one built by IdeaForge, a company founded by three IIT, Bombay alumni. The Defence Research and Development Organization (DRDO) has tied up with IdeaForge to refine the UAV — now named Netra — and is learnt to be preparing to pitch it to the Army.

Netra has already been demonstrated before the NSG, Central Reserve Police Force (CRPF), Border Security Force (BSF), Delhi Police, Maharashtra Police and the Uttar Pradesh Special Task Force, and has drawn special attention from forces currently engaged in anti-Naxal operations. The product will be on display at the forthcoming Defence Expo in New Delhi.

Weighing 1.5 kg, and having a payload capacity of 300 g, Netra — originally called Zeppelin and subsequently Carbon — can perform Vertical Take-off and Landing (VTOL) operations. It can fly in a radius of 1.5 km at altitudes of over 100 m, for 30 minutes per battery charge. Each unit costs between Rs 18 lakh and 20 lakh, but the price is expected to drop once it is manufactured in larger numbers.

The UAV is fitted with a high resolution 2.5X zoom camera, which can be panned and tilted. It beams real-time live aerial images, and can record the footage. An in-built fail-safe mechanism ensures the UAV returns to its home position in case of loss of communication or low battery.

While Netra's design continues to be developed and refined by IdeaForge, DRDO has been collaborating to make the backpack case that is used by the operator to initiate the flight plan and serves as the base station.

"Most of the paramilitary forces who have been shown this product have sought night-operability of this machine so that it can be used for surveillance during night time. Also, one of the forces wants the machine to be operable indoors. We are planning to make some customizations including putting a thermal camera on Netra," said Amardeep Singh of IdeaForge.

The UAV's Zeppelin prototype was the joint winner at MAV 08, an international competition of micro aerial vehicles. "It was then that we decided to further work on the design. We showcased a prototype in December 2008, following which the DRDO got into the picture," Singh said.