Interview with Col Aravind Mulimani

VP, Projects (Air Defence), Zen Technologies

The rapid spread of drone technology is reshaping modern warfare. From inexpensive commercial quadcopters to loitering munitions and increasingly autonomous systems, unmanned aerial platforms have become integral to battlefield operations. As a result, counter–UAS solutions are emerging as a vital element of national defence frameworks. In this interaction with Vayu Aerospace & Defence Review, Col Aravind Mulimani, Vice President – Projects (Air Defence) at Zen Technologies, shares insights on the evolving drone threat, the growing role of artificial intelligence in counter–UAS systems, and how the company is enhancing its capabilities to address new operational challenges.

***VAYU**: Zen Technologies has expanded significantly into counter–drone and air defence solutions in recent years. What drove the company to focus on this segment?*

The move into counter–drone and air defence systems is largely driven by the changing nature of modern warfare. Conflicts such as Nagorno–Karabakh and the Russia–Ukraine war, the long drawn Israeli conflict in Gaza and the on–going US/Israel–Iran crisis have clearly demonstrated how low cost drones can influence battlefield outcomes. At the same time, India has experienced increasing drone activity along its borders, underlining the importance of developing indigenous counter–UAS capabilities.

For Zen Technologies, this expansion is also a natural extension of our expertise in simulation technologies, sensor integration, AI–driven analytics, and command–and–control systems. These capabilities translate directly into operational counter–drone platforms. Combined with India's emphasis on defence indigenisation, the sector represents both a strategic necessity and a strong growth opportunity.

***VAYU**: How closely does Zen work with the armed forces while developing these systems? To what extent does operational feedback from users shape the final product?*

Our development process is highly collaborative and driven by operational requirements. Most programmes begin with inputs from the armed forces that define the operational gaps and mission profiles the systems must address. During development, prototypes undergo extensive trials where service personnel evaluate them in realistic operational scenarios. Feedback from these trials plays a critical role in refining detection performance, deployment speed, system interfaces, and interoperability with existing command networks.

Given Zen's long experience in training technologies, we also place strong emphasis on operator usability and decision support. Even after induction, operational feedback continues to guide upgrades and system enhancements. Our concept of design and development