

## Yatra gets a Netra

Ujjwala Nayudu Posted online: Sun Jul 14 2013, 00:18 hrs

## Ahmedabad:

Camera check, sensors check, altitude... Netra ready to take off! Go." On the terrace of the local court building at Mirzapur in Ahmedabad, Bharat Kataria gently releases a small fiberglass contraption and it soars. Netra, an unmanned aerial vehicle or drone, is Gujarat's latest surveillance gadget and Kataria, 35, a Sub-Inspector with the technical team of the state Anti Terrorism Squad, is the man at the controls. Today, July 10, is Netra's first day at work and it has been tasked to monitor the Jagannath Rath Yatra in Ahmedabad, an 18-km route from Jagannath mandir in the city's Jamalpur area to Saraspur and back.

Back on the terrace, Kataria has positioned himself behind a table that has a laptop-like device, called the toughbook, that acts as the control-room for the UAV. A communication box set on a tripod keeps a constant watch on the drone, working on a "line of sight" system. The footage captured by the drone's camera and GPS is reflected in Kataria's toughbook, which he uses to send out commands to the UAV.

Kataria has a tough assignment. Not only does he have to coordinate with the drone, but also with the Crime Branch, Special Branch personnel and his own men from the ATS stationed at four different points on the route.

Kataria was tasked with handling security during last year's rath yatra too, but this time it sure feels different. "Earlier, I only knew the area where I was deployed for bandobast duty. Now with Netra, I understand not only the route but every single road, lane, building and even the terraces and parapets."

With Netra now gliding along, Kataria turns around and says, "Look, we have sent the UAV to a height of 50 metres towards the north." Netra soon starts doing its job—capturing and beaming on to Kataria's toughbook visuals of the deity's chariots, processions of wrestlers from various akhadas, chariots and trucks. There are also images of bhajan mandalis dancing along the route and devotees jostling for prasad.

On his toughbook, Kataria notices a minor commotion among the akhada members. He instructs Netra to zoom its camera and focus on the spot. "Some of the akhadas are stuck in Khamasa area while performing stunts," he says. He calls the policeman on duty in Khamasa and tells him to ensure the akhadas move fast.

"In such situations, a CCTV camera can only capture the spot, alerting the officer in the control room. But a policeman deployed at another point would be clueless as to why the chariots haven't reached their point. Now with this drone, we could easily clear the way for the akhadas to move faster. Similarly, there was a long time-gap between two chariots at Shahpur. We immediately asked officers to clear the crowd and roll the raths faster," says Kataria.

Just then, Ahmedabad Police Commissioner S K Saikia walks in. He wants to know about the hold-up at Khamasa. Kataria shows him the visuals of the akhada procession on his toughbook and they discuss arrangements and security on the yatra route.

With Netra now busy capturing images of building tops, street corners and groups of people, Kataria says, "The drone works as if it has sensory organs. If it has problems flying—weather trouble, battery getting exhausted or other technical problems—it returns on its own to the home point (from where it started) and alerts the operator

about the glitch." The UAV also records its flying hours on its own and if instructed, can land midway to record things in detail.

In March, the Gujarat Police purchased two UAVs from a private firm in Mumbai run by ex-IITians. The drone, designed as per guidelines of the Defence Research and Development Organisation, is made of advanced fiberglass and weighs less than 2 kg. It flies at a speed of 30 km per hour and can cover an area of 2-3 km.

Kataria and his team supervised by ATS DSP R V Chudasama were trained for two weeks on controlling the drone. "We were trained to work like pilots. The only difference is that we are operating this aircraft without sitting in it. We were trained in handling the camera, temperature, altitude, takes-offs, landing, operating the software on the toughbook etc."

Kataria, a native of Bhavnagar, has a Masters in Computer Applications and with his love for computers and technology, it was only natural for the department to turn to him when they bought the drone. He joined the police force in 2008 and served in Junagadh for three years.

Netra has now been in the sky for about an hour and a half. After today's Jagannath yatra, it has more sorties coming up. With the Lok Sabha elections next year, Netra will be deployed to cover Chief Minister Narendra Modi's functions and rallies. Besides, it will be used for threat assessments, law and order, bandobast planning and intelligence gathering.

Kataria carefully coordinates Netra's landing and asks his boys to check its battery, temperature and camera. "Landing smooth... Pack up," he says. "Wasn't that incredible?"