# *Wireless airport surveillance tracks aircraft*

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Airport managers have a tool for tracking the comings and goings of every aircraft that uses their airport. A system developed by TTI Wireless captures registration numbers of any aircraft that passes by the TTI camera. TTI's Wireless Access Surveillance Platform (Wasp) consists of digital cameras positioned next to runways or taxiways and on-airport buildings, which send photos wirelessly to a computer in the airport manager's office and to the central Wasp system, where operators check the registration numbers against registry databases. The Wasp system can also include fixed pan-tilt-zoom cameras to watch ramp areas, entry gates and building exteriors. "The airport had to prove it could track down [noise] offenders," said Dale Albright, TTI chief technology officer. Wasp could do just that, capturing images of aircraft with time-stamped information that can be matched against noise monitor data.

Taking advantage of a potentially sizeable new market, TTI equipped a van with a wireless digital camera system and gave demos at airports in the southeastern United States.

Airport managers found that the TTI system was ideal for many uses, including security, recording movements for assessing airport fees and helping provide accurate aircraft counts to support installation of control towers and movement-based funding mechanisms.

While the TTI system wasn't originally targeted for airports, after the company showed the system to officials in Beaufort N.C., in 2003 it quickly became apparent that Wasp could be used to track movements at airports. Beaufort had a problem with noisy aircraft flying over its historic district, and the airport planned to extend a runway but encountered roadblocks regarding noise issues.


*On-airport cameras track aircraft movements, sending images to the airport manager and the Central WASP System.*

Other uses have come to light, too, including placing stolen aircraft on a watch list that automatically e-mails selected authorities if the aircraft's registration number shows up in the Wasp database. With the right kind of camera, Wasp could even help transmit images of runway condition, which could then be forwarded to airline and flight department dispatchers. The systems could also be helpful for evaluating runway incursions.

Wasp is not just for airport operators. FBOs could use the system to supplement flight-tracking programs that display inbound aircraft. An airport, for example, might install a Wasp system and invite FBOs to pay for access to the reports of aircraft movements, information that FBOs could use to market their services. Thompson would like to see a consortium of area airports form a wide-area Wasp network. That way, if something happened at a Wasp-equipped airport authorities could quickly assess the situation and deploy appropriate emergency services. Also, stolen airplanes put on the Wasp watch list could be tracked easily if enough airports had the system and the stolen airplane passed a TTI camera.